

## **Close Out Documents**

### **AP-73 – 4600 Clayton St.**

Asbestos Abatement and Structural Demolition

#### **Prepared for:**

Kiewit Infrastructure Co.  
Attn: Megan Wood  
160 Inverness Drive West, Suite 110  
Englewood CO 80112

## Contents:

1. Closeout Letter
2. CDPHE Asbestos Abatement Permit
3. CDPHE Demolition Permit
4. JKS Asbestos Certifications
5. JKS Workers Asbestos Certifications
6. Project Design
  - a. SSAR
  - b. Asbestos Abatement Project Design
  - c. Pre-Demolition Engineering Survey
7. Asbestos Clearance Report
8. Materials Summary
9. Waste Manifests
  - a. Asbestos Waste Manifests
10. Weight Tickets
  - a. Daily Load Trackers and Associated Truck Tickets
  - b. Waste Weight Tickets
11. Dump Diversion Summary
12. Containment Entry/Exit Log
13. Daily Logs

# 1. Closeout Letter

February 18, 2019

Kiewit Infrastructure Co.  
160 Inverness Drive West, Suite 110  
Englewood, CO 80112

**Re: SSCR AP-73 4600 Clayton St.**

Dear Kiewit Infrastructure Co.

This letter is confirm that all the work associated with the asbestos abatement and demolition of the structure located at 4600 Clayton St. Denver, CO 80216, also referred as parcel AP-73, is complete.

The scope of work included asbestos abatement, demolition of an 1,654 square foot residential structure, demolition of a 325 square foot detached garage, and the removal of the curb and driveway. No Regulated Building Materials (RBMs) were found on the site.

This document has been prepared to furnish you with key documents associated with this project for your records.

On behalf of the JKS Industries team, we would like to extend our appreciation to working with you on this project and look forward to working with you in the future.

Regards,



Jeffrey Knight,  
President

## 2. CDPHE Asbestos Abatement Permit

## **ASBESTOS ABATEMENT PERMIT**

This permit is granted subject to Colorado Air Quality Control Commission Regulation No. 8, Part B, adopted December 21, 2007, and effective January 30, 2008, the Colorado Air Pollution Prevention and Control Act (25-7-101 or 25-7-501 et seq., C.R.S.) and the following provisions. It is only for the purpose of allowing asbestos abatement.

### **ADDITIONAL PERMIT PROVISIONS:**

By performing work under this permit the abatement contractor agrees that the Division may revoke or suspend this permit should the Division find that the contractor:

- has violated or has aided and abetted in the violation of 25-7-101 or 25-7-501 et seq., C.R.S. or Regulation No. 8, Part B, or an order of the Division or Commission,
- has failed to meet any permit and notification requirement or failed to correct any violations cited by the Division during any inspection within a reasonable period of time, as may be determined by the Division,
- has used misrepresentation or fraud in obtaining this permit, or,
- has committed any act or omission which does not meet generally accepted standards of the practice of asbestos abatement.

As a contractor, you may be subject to other licenses and permits, depending on the requirements of the county and municipality in which the work is being performed. The Colorado Department of Public Health and Environment, Air Pollution Control Division strongly suggests that you check with county and municipal authorities in order to determine any other local building/permitting requirements that must be met.

### **THE ORIGINAL PERMIT MUST BE POSTED ON SITE AT ALL TIMES.**

*Immediately notify the Asbestos/IAQ Unit of project modifications by fax (number above) or e-mail (address above) and the appropriate county health department by fax. Project modifications include changes in the scope of work or the scheduled work dates, etc.*

This asbestos abatement permit is valid beginning 10/23/2018 through 11:59 PM on 10/22/2019.  
The actual scheduled work dates are from 12/6/2018 through 12/19/2018.

Approval issued on: 11/19/2018  
Record number: 143492

Fee paid: \$80.00  
Check number: 5663

### **Notice Number: 18DE7238A-21**

Variance: None  
Comments: None

Project Supervisor:  
**Andre M. Williams**  
Certification No.: 15776

For the location specified below:

**AP-73 residential  
Room 3 & Basement  
4600 Clayton St.  
Denver  
Denver County**

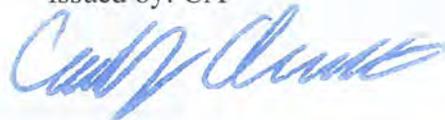
Project AMS:  
**Logan Greenfield**  
Certification No.: 20715

Project Manager:  
**WAIVED**  
Certification No.: 15045

This permit has been issued to:

**JKS Industries, LLC  
747 Sheridan Blvd Unit 9A  
Lakewood, CO 80214**

Issued by: CA



# ASBESTOS ABATEMENT NOTIFICATION and PERMIT APPLICATION FORM

FEE MUST ACCOMPANY THIS FORM. INCOMPLETE APPLICATIONS WILL BE RETURNED.



Colorado Department  
of Public Health  
and Environment

Single Family Residential Dwelling (SFRD) > 50 LF or 32 SF or a 55-gal. drum, but ≤ 260 LF or 160 SF or a 55-gallon drum	Public and Commercial Building, School, and Single-Family Residential Dwelling: > 260 LF or 160 SF or a 55-gallon drum
[ code 200 ] <input type="checkbox"/> \$0 Courtesy Notice	[ code 100 ] <input type="checkbox"/> \$0 Courtesy Notice
[ code 205 ] <input type="checkbox"/> \$60 Non-Public Access Notice (Opt Out)	[ code 105 ] <input type="checkbox"/> \$80 Non-Public Access Notice
[ code 210 ] <input type="checkbox"/> \$60 Notice	[ code 110 ] <input type="checkbox"/> \$80 Notice
[ code 230 ] <input type="checkbox"/> \$180 30-Day Permit	[ code 130/232 ] <input type="checkbox"/> \$400 30-Day P&C/SFRD Permit
[ code 290 ] <input type="checkbox"/> \$300 90-Day Permit	[ code 190/292 ] <input type="checkbox"/> \$800 90-Day P&C/SFRD Permit
[ code 265 ] <input type="checkbox"/> \$420 365-Day Permit	[ code 165/267 ] <input type="checkbox"/> \$1200 365-Day P&C/SFRD Permit
[ code 180/280 ] <input type="checkbox"/> \$55 Notice or Permit Transfer	[ code 177 ] <input type="checkbox"/> \$80 Phase <u>21</u> of Multiple Phase Permit # <u>177</u>

Submit form to:  
Permit Coordinator  
Colorado Dept. of Public Health  
and Environment  
APCD-IE-B1  
4300 Cherry Creek Drive South  
Denver, CO 80246-1530  
Phone: 303-692-3100  
Fax: 303-782-0278  
asbestos@state.co.us

Abatement Contractor			Abatement Site			Building Owner		
Company Name JKS Industries			Building Name AP-73 Residential			Owner Name CDOT		
Street Address 747 Sheridan Blvd. Unit 9A			Specify location in the building where work will take place (e.g. floor, room, wing, etc.) Room 3 and Basement			Contact Anthony DaVito		
City Lakewood	State CO	Zip code 80214	Street Address 4600 Clayton Street			Street Address 2000 S. Holly St.		
Telephone # (303) 238-0207	Fax # (303) 238-0452		City Denver	County Denver	Zip code 80216	City Denver	State CO	Zip code 80222
Project Supervisor Theo Rowland		CO. Cert # 10317	Building Contact Doug Messier		Cell Phone # (817) 320-6749	Telephone # (303) 512-5900		Fax # ( )
Project Personnel			Project Information			Disposal Site		
CO Project Mgr. Name See Project Manager Waiver form from CDOT			Start Date 12/06/2018	End Date 12/19/2018		Landfill Name Denver Arapahoe Disposal		
Cell Phone # ( )	CO Project Designer #		Start Time 6:30am AM	End Time AM 5:00 PM		Street Address 3500 South Gun Club Road		
CO Project Designer Name Daniel Beecke			Check the day(s) of operation: Su M Tu W Th F Sa <input type="checkbox"/> <input checked="" type="checkbox"/>			City Aurora	State CO	Zip code 80018
Cell Phone # (303) 232-2660	CO Project Designer # 1947		Emergency? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	Type of ACM: TSI, Texture, VAT, etc. Paper Duct Wrap and VAT		CDPHE Use Only		
Consulting Firm Name All Phase Consulting, Inc.		Registration # 15979	Linear Feet / Type	Square Feet / Type 10 SF of Paper Duct Wrap	55 gal. Drums	Postmark or Delivery date 11/9/18	Approved by: <i>[Signature]</i>	
A.M.S. Name Logan Greenfield				338 SF of VAT		Form of Payment & # ck # 5063 / 80.00	PM req'd? Y (N) W	
Cell Phone # (719) 545-0375	CO A.M.S. Cert # 20715					Permit # 181072382	Record # 15498	Date Issued:

Please describe below the work practices and procedures to be employed in conducting the abatement of asbestos. **BE SPECIFIC.** Indicate type(s) of ACBM to be abated (e.g. VAT, ceiling tile, TSI, etc.). Use another page if necessary.

This Phase 21 project will consist in removal and disposal of 10 SF of paper duct wrap under a secondary Glovebag containment. The friable materials will be removed using small hand tools (carpenters hammer, cats claw, crow bar and chisels) the material will be kept wet (1500 psi airless sprayer with amended water). The material will be enclosed in a glovebag and a secondary containment, will employ negative air pressure, a two chamber decontaminatin with HEPA vaccum and wet rags. This work will be completed per the Appendix A small scale projects guide lines. All work will be in accordance with Colorado Regulation #8 Part B. The secondary glove bag conatinment will be inspected and cleared by a State Certified AMS.

This project will consist in removal and disposal of 338 SF of VAT under a secondary containment. The non-friable materials will be removed using small hand tools (carpenters hammer, cats claw, crow bar and chisels) the material will be kept wet (1500 psi airless sprayer with amended water). The secondary containment, will employ negative air pressure, a two chamber decontaminatin with HEPA vaccum and wet rags. The secondary containment will be inspected and cleared by a State Certified AMS. The VAT floor tile will remain non-friable thru out the removal and disposal process.

### 3. CDPHE Demolition Permit

**Colorado Department of Public Health and Environment**  
Air Pollution Control Division – Indoor Environment Program – Asbestos/IAQ Air Unit  
4300 Cherry Creek Drive South, APCD-IE-B1  
Denver, Colorado 80246-1530  
Phone: 303-692-3100 – Fax: 303-782-0278  
E-mail: asbestos@state.co.us

## DEMOLITION APPROVAL NOTICE

This approval notice is granted subject to Colorado Air Quality Control Commission Regulation No. 8, Part B, adopted December 21, 2007, and effective January 30, 2008 and the Colorado Air Pollution Prevention and Control Act C.R.S. (25-7-101 and 25-7-501 et seq). This notice signifies that the structure was inspected for asbestos, luminous exit signs (containing radioactive material), and Ozone-Depleting Refrigerants and the demolition contractor has properly notified the Colorado Department of Public Health and Environment pursuant to Regulation No. 8, Part B.

As a contractor, you may be subject to other demolition licenses and permits, depending on the requirements of the county and municipality in which the work is being performed. The Colorado Department of Public Health and Environment, Air Pollution Control Division, strongly suggests that you check with county and municipal authorities in order to determine any other local building/permitting requirements that must be met.

**Please note that certain asbestos-containing materials (ACM) may remain in the structure during demolition. Therefore, any demolition debris left behind after the completion of post-demolition site cleanup may constitute a "reason to know of asbestos-contaminated soil" at the site, subject to the requirements of Section 5.5 of the Solid Waste Regulations (6 CCR 1007-2, Part 1).**

**THE ORIGINAL APPROVAL NOTICE MUST BE POSTED ON SITE AT ALL TIMES.**

*Immediately notify the Asbestos/IAQ Unit of project modifications by fax (number above) or e-mail (address above) and the appropriate county health department by fax. Project modifications include changes in the scope of work or the scheduled work dates, etc.*

This demolition approval notice is valid beginning 12/26/2018.

The actual scheduled work dates are from 12/26/2018 through 1/31/2019.

Approval issued on: 12/27/2018

Record number: 144524

**Notice Number: 18DE8621D**

For the location specified below:

**AP-73 Residential**

**4600 Clayton St.**

**Denver**

**Denver County**

Fee Paid: \$60.00

Check number: 5889

Asbestos Building Inspector:

**Logan Greenfield**

Cerification No.: 20715

Inspection Date: 12/19/2018

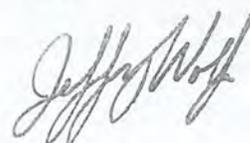
This notice has been issued to:

**JKS Industries, Inc.**

**747 Sheridan Blvd. Unit 9A**

**Lakewood, CO 80214**

Issued by:





# DEMOLITION NOTIFICATION APPLICATION FORM

APPLICATION FEE MUST ACCOMPANY THIS FORM  
INCOMPLETE APPLICATIONS WILL BE RETURNED

(Notice will be mailed to the demolition contractor unless specified otherwise)

Fee: \$50 + \$5 per 1000 ft<sup>2</sup> of area to be demolished = \$ 60.00  
(See instruction #1 on reverse side)

Submit form to:  
Permit Coordinator  
Colorado Dept. of Public  
Health and Environment  
APCD-IE-B1  
4300 Cherry Creek Drive  
South  
Denver, CO 80246-1530  
Phone: 303-692-3100  
Fax: 303-782-0278  
Asbestos@state.co.us

olorado Department  
of Public Health  
and Environment

Demolition Contractor	Company Name: <b>JKS Industries</b>		Building Name: <b>AP-73 Residential</b>		
	Street: <b>747 Sheridan Blvd. #9A</b>		Square footage of footprint of facility or portion of facility to be demolished <b>1654</b>		
	City: <b>Lakewood</b>	State: <b>CO</b>	Zip Code: <b>80214</b>	Street: <b>4600 Clayton St.</b>	
	Telephone # <b>(303) 238-0207</b>	Fax # <b>(303) 238-0452</b>	City: <b>Denver</b>		County: <b>Denver</b>
	Project Manager: <b>Jeffrey Knight</b>		Cell Phone # <b>(720) 402-4410</b>		Zip Code: <b>80216</b>
	I certify that the Certified Asbestos Building Inspector has informed me about any remaining asbestos-containing materials in the facility to be demolished.		Proposed Start Date <b>12/26/2018</b>		Proposed Completion Date <b>1/31/2019</b>
	Signature:		Print Name: <b>Jeffrey Knight</b>		Method/Mean of Demolition: <input checked="" type="checkbox"/> Wrecking <input type="checkbox"/> Burning <sup>†</sup> <input type="checkbox"/> Implosion <input type="checkbox"/> Moving <input type="checkbox"/> Other, specify:
Landfill Receiving Building Debris: <b>Denver Arapahoe Disposal Site</b>		† Burning requires additional authorization – Please call (303) 692-3100 and ask to speak to the Open Burning Permit Coordinator			
Asbestos Removal Contractor	General Abatement Contractor (GAC) <b>JKS Industries</b>		Owner's Name: <b>CDOT</b>		
	CDPHE Asbestos Permit # <b>18DE7238A-21</b>	Total Quantity of Asbestos Removed <b>348 SF</b>	Street: <b>2000 S Holly St.</b>		
	Date Removal Completed <b>12-19-18</b>	Telephone # <b>(303) 238-0207</b>	City: <b>Denver</b>		State: <b>CO</b>
	Type(s) of Asbestos-Containing Material Removed: <b>10 SF Paper Duct Wrap, 338 SF VAT</b>		Zip Code: <b>80222</b>		Contact's Name: <b>Anthony DaVito</b>
Certified Asbestos Inspector Certification	With my signature below, I certify that I possess current AHERA accreditation and state of Colorado certification as an Asbestos Building Inspector. I also certify that I have thoroughly inspected the facility to be demolished, as listed in the Demolition Site block above, sampled all suspect materials, had all samples analyzed for the presence of asbestos by a NVLAP-accredited laboratory, and have determined that no Regulated ACM exists anywhere in the facility.* I also certify that I have informed the owner/operator of the facility or the demolition contractor that any asbestos-containing material allowed to stay in the facility must remain non-friable during demolition. Specify type(s) of ACM remaining, below: (check appropriate box(es)):				
	<input type="checkbox"/> Vinyl asbestos floor tile (VAT) <input type="checkbox"/> VAT mastic <input type="checkbox"/> Tar/asphalt impregnated roofing <input type="checkbox"/> Asphaltic pipe coatings <input type="checkbox"/> Spray-applied tar coatings <input type="checkbox"/> Caulking <input type="checkbox"/> Glazing <input type="checkbox"/> Other, specify:				
	Signature: (In Blue Ink) 		Printed Name: <b>Logan Greenfield</b>		
Building Owner or Contractor	Date of Final Inspection <b>12-19-18</b>	CO Cert # <b>20715</b>	Expiration Date <b>Oct. 18, 2019</b>	Telephone # <b>(719) 545-0375</b>	Cell Phone # <b>(719) 250-0036</b>
	I verify that all refrigerants from air conditioning/refrigeration appliances have been properly recovered in accordance with AQCC Regulation No. 15 (for information on CFC requirements call 692-3100). I further verify that all luminous exit signs (containing radioactive material) have been disposed of in accordance with 6 CCR 1007-1 subpart 3.6.4.3 (for information on luminous exit sign requirements call 303-692-3320).				
	CHECK THE APPROPRIATE BOX: <input type="checkbox"/> Building Owner <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Other				
Signature: 		Print Name: <b>JEFF Knight</b>			Date: <b>12/18/18</b>
<b>THIS BOX IS FOR CDPHE USE ONLY:</b>					
Postmark or Hand Delivery Date: <b>12/20/18</b>		Approved By: 		Code: <input checked="" type="checkbox"/> initial-310 <input type="checkbox"/> transfer-380	
Form of Payment & #: <b>check # 5889/60.00</b>		Permit #: <b>18D086211</b>		Record #: <b>144521</b>	Date Issued:

\* Regulated asbestos-containing materials means (a) friable asbestos-containing material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this regulation. Note: Asbestos-containing sheet vinyl and linoleum must be properly abated/removed prior to demolition.

APPROVED

DATE: 12/24/18 CDPHE

DEC 20 2018

APCD Stationary Sources

**Colorado Department of Public Health and Environment**  
Air Pollution Control Division – Indoor Environment Program – Asbestos/IAQ Air Unit  
4300 Cherry Creek Drive South, APCD-IE-B1  
Denver, Colorado 80246-1530  
Phone: 303-692-3100 – Fax: 303-782-0278  
E-mail: asbestos@state.co.us

## DEMOLITION APPROVAL NOTICE

This approval notice is granted subject to Colorado Air Quality Control Commission Regulation No. 8, Part B, adopted December 21, 2007, and effective January 30, 2008 and the Colorado Air Pollution Prevention and Control Act C.R.S. (25-7-101 and 25-7-501 et seq). This notice signifies that the structure was inspected for asbestos, luminous exit signs (containing radioactive material), and Ozone-Depleting Refrigerants and the demolition contractor has properly notified the Colorado Department of Public Health and Environment pursuant to Regulation No. 8, Part B.

As a contractor, you may be subject to other demolition licenses and permits, depending on the requirements of the county and municipality in which the work is being performed. The Colorado Department of Public Health and Environment, Air Pollution Control Division, strongly suggests that you check with county and municipal authorities in order to determine any other local building/permitting requirements that must be met.

**Please note that certain asbestos-containing materials (ACM) may remain in the structure during demolition. Therefore, any demolition debris left behind after the completion of post-demolition site cleanup may constitute a "reason to know of asbestos-contaminated soil" at the site, subject to the requirements of Section 5.5 of the Solid Waste Regulations (6 CCR 1007-2, Part 1).**

**THE ORIGINAL APPROVAL NOTICE MUST BE POSTED ON SITE AT ALL TIMES.**

*Immediately notify the Asbestos/IAQ Unit of project modifications by fax (number above) or e-mail (address above) and the appropriate county health department by fax. Project modifications include changes in the scope of work or the scheduled work dates, etc.*

This demolition approval notice is valid beginning 12/26/2018.

The actual scheduled work dates are from 12/26/2018 through 1/31/2019.

Approval issued on: 12/27/2018

Record number: 144525

**Notice Number: 18DE8622D**

For the location specified below:

**AP-73 Garage**

**4600 Clayton St.**

**Denver**

**Denver County**

Fee Paid: \$55.00

Check number: 5889

Asbestos Building Inspector:

**Logan Greenfield**

Cerification No.: 20715

Inspection Date: 12/19/2018

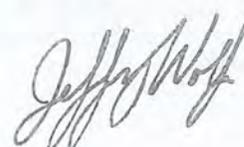
This notice has been issued to:

**JKS Industries, Inc.**

**747 Sheridan Blvd. Unit 9A**

**Lakewood, CO 80214**

Issued by:





# DEMOLITION NOTIFICATION APPLICATION FORM

APPLICATION FEE MUST ACCOMPANY THIS FORM  
INCOMPLETE APPLICATIONS WILL BE RETURNED

(Notice will be mailed to the demolition contractor unless specified otherwise)

Fee: \$50 + \$5 per 1000 ft<sup>2</sup> of area to be demolished = \$ 55.00  
(See instruction #1 on reverse side)

Submit form to:  
Permit Coordinator  
Colorado Dept. of Public  
Health and Environment  
APCD-IE-B1  
4300 Cherry Creek Drive  
South  
Denver, CO 80246-1530  
Phone: 303-692-3100  
Fax: 303-782-0278  
Asbestos@state.co.us

Colorado Department  
of Public Health  
and Environment

<b>Demolition Contractor</b>	Company Name: <b>JKS Industries</b>		Building Name: <b>AP-73 Garage</b>		
	Street: <b>747 Sheridan Blvd. #9A</b>		Square footage of footprint of facility or portion of facility to be demolished <b>325</b>		
	City: <b>Lakewood</b>	State: <b>CO</b>	Zip Code: <b>80214</b>	Street: <b>4600 Clayton St</b>	
	Telephone # <b>(303) 238-0207</b>	Fax # <b>(303) 238-0452</b>	City: <b>Denver</b>		Zip Code: <b>80216</b>
	Project Manager: <b>Jeffrey Knight</b>	Cell Phone # <b>(720) 402-4410</b>	Proposed Start Date <b>12/26/2018</b>		Proposed Completion Date <b>1/31/2019</b>
	I certify that the Certified Asbestos Building Inspector has informed me about any remaining asbestos-containing materials in the facility to be demolished.		Method/Mean of Demolition: <input checked="" type="checkbox"/> Wrecking <input type="checkbox"/> Burning <sup>†</sup> <input type="checkbox"/> Implosion <input type="checkbox"/> Moving <input type="checkbox"/> Other, specify:		
Signature:		Print Name: <b>Jeffrey Knight</b>			
Landfill Receiving Building Debris: <b>Denver Arapahoe Disposal Site</b>		† Burning requires additional authorization – Please call (303) 692-3100 and ask to speak to the Open Burning Permit Coordinator			
<b>Asbestos Removal Contractor</b>	General Abatement Contractor (GAC) <b>N/A</b>		Owner's Name: <b>CDOT</b>		
	CDPHE Asbestos Permit #	Total Quantity of Asbestos Removed		Street: <b>2000 S Holly St.</b>	
	Date Removal Completed	Telephone #		City: <b>Denver</b>	
	Type(s) of Asbestos-Containing Material Removed:		State: <b>CO</b>	Zip Code: <b>80222</b>	
		Contact's Name: <b>Anthony DaVito</b>	Telephone # <b>(303) 512-5900</b>		
<b>Certified Asbestos Inspector Certification</b>	With my signature below, I certify that I possess current AHERA accreditation and state of Colorado certification as an Asbestos Building Inspector. I also certify that I have thoroughly inspected the facility to be demolished, as listed in the Demolition Site block above, sampled all suspect materials, had all samples analyzed for the presence of asbestos by a NVLAP-accredited laboratory, and have determined that no Regulated ACM exists anywhere in the facility.* I also certify that I have informed the owner/operator of the facility or the demolition contractor that any asbestos-containing material allowed to stay in the facility must remain non-friable during demolition. Specify type(s) of ACM remaining, below: (check appropriate box(es)):				
	<input type="checkbox"/> Vinyl asbestos floor tile (VAT) <input type="checkbox"/> VAT mastic <input type="checkbox"/> Tar/asphalt impregnated roofing <input type="checkbox"/> Asphaltic pipe coatings <input type="checkbox"/> Spray-applied tar coatings <input type="checkbox"/> Caulking <input type="checkbox"/> Glazing <input type="checkbox"/> Other, specify:				
	Signature: (In Blue Ink) 		Printed Name: <b>Logan Greenfield</b>		
	Date of Final Inspection <b>12-19-18</b>	CO Cert # <b>20715</b>	Expiration Date <b>Oct. 18, 2019</b>	Telephone # <b>(719) 545-0375</b>	Cell Phone # <b>(719) 250-0036</b>
<b>Building Owner or Contractor</b>	I verify that all refrigerants from air conditioning/refrigeration appliances have been properly recovered in accordance with AQCC Regulation No. 15 (for information on CFC requirements call 692-3100). I further verify that all luminous exit signs (containing radioactive material) have been disposed of in accordance with 6 CCR 1007-1 subpart 3.6.4.3 (for information on luminous exit sign requirements call 303-692-3320).				
	CHECK THE APPROPRIATE BOX:				
	<input type="checkbox"/> Building Owner	<input checked="" type="checkbox"/> Contractor	<input type="checkbox"/> Other	Date: <b>12/19/18</b>	
Signature:		Print Name: <b>JEFFREY KNIGHT</b>			

### THIS BOX IS FOR CDPHE USE ONLY!

Postmark or Hand-Delivery Date: <b>12/20/18</b>	Approved By:	Code: <input checked="" type="checkbox"/> initial-310 <input type="checkbox"/> transfer-380
Form of Payment & #: <b>check # 5889/55.00</b>	Permit #: <b>18DPS16221</b>	Record #: <b>144525</b> Date Issued:

\* Regulated asbestos-containing materials means (a) friable asbestos-containing material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this regulation. Note: Asbestos-containing sheet vinyl and linoleum must be properly abated/removed prior to demolition.

APPROVED  
DATE **12/24/18** CDPHE

DEC 20 2018  
APCD  
Stationary  
Sources

## 4. JKS Asbestos Certifications



Colorado Department  
of Public Health  
and Environment

## General Abatement Contractor

This certifies that

**JKS Industries, LLC**

**GAC No.: 18531**

has met the certification requirements of 25-7-507, C.R.S. and Air Quality Control Commission Regulation No. 8, Part B, and is hereby authorized to perform asbestos abatement activities in the state of Colorado.

**Issued: July 18, 2018**

**Expires: July 18, 2019**

  
Authorized/APCD Representative

**SEAL**

## 5. JKS Workers Asbestos Certifications

Colorado Department  
of Public Health and  
Environment



Supervisor



Asbestos Certification

George W.  
Thomas

Expires: 10/25/2019 Cert. #: 17192

Date Issued: 10/16/2018

# INTERNATIONAL

Environmental and Safety Training LLC  
720 Billings Street Unit F  
Aurora, Colorado 80011  
Phone # (720) 859-3134  
Fax # (720) 859-0660



*CERTIFIES THAT*

**GEORGE W. THOMAS**

Has successfully completed  
The **EPA- APPROVED AHERA ANNUAL ASBESTOS REFRESHER**  
**COURSE** for **CONTRACTOR/SUPERVISOR**  
And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the  
**Toxic Substance Control Act (TSCA)**

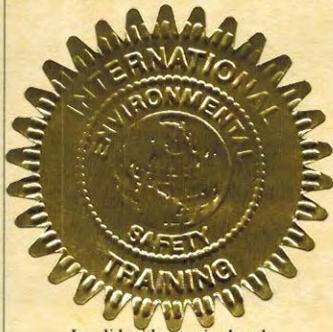
Course Date 10/06/2018

No. Hours 8

Certificate No. CO100618-04ASR

Expires 10/06/2019

This course meets the  
requirements of  
AQCC Reg. #8 Part B



Invalid without raised seal

Training Director

**Midtown Occupational Health Services**  
2490 W. 26<sup>th</sup> Ave. Ste. 300-A Denver, CO 80211  
Phone: (303) 831-9393 Fax: (303) 831-6335  
**OSHA Asbestos Certification**

Applicants Name George Thomas

The above individual was seen by me on 02-06-2018 in accordance to 29 CFR 1926.1101(Asbestos Certification) and 29CFR1910.134 (Respirator Certification). The following was performed:

1.  Completion and review of the standardized medical questionnaire and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems per Appendix D in 1926.1101
2.  Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, and the personal protective and respiratory equipment to be utilized by this individual.
3.  Review of information from previous medical examinations, if available.
4.  A physical examination with emphasis upon the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1).
5.  Determined that a chest roentgenogram was  was not  required as part of this examination. (note: according to CFR 1926.1101 (M)(2)(ii)(C) it is at the discretion of the physician whether or not a chest X-ray is required)
6.  Reviewed OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2 in accordance with 29CFR 1910.134 and have determined that this individual may  may not  use a respiratory device while performing his/her required duties.
7.  The employee has been instructed to report any difficulties in using the respirators or any change of physical status to their supervisor or physician.
8.  In accordance with OSHA requirements, I have fully explained the results of the medical examination and laboratory tests to the above named patient.
9.  In accordance with OSHA I have informed this individual of the health risks involved with smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.

**Midtown Occupational Health Services**  
**2490 W. 26<sup>th</sup> Ave. Ste. 300-A Denver, CO 80211**  
**Phone: (303) 831-9393 Fax: (303) 831-6335**  
**OSHA Asbestos Certification**

X There is no detected medical condition which would place this employee at an increased risk of material health impairment from exposure to asbestos, and there are no recommended limitations on the employee concerning the use of personal protective equipment or respirator.

\_\_\_\_\_ There is a detected medical condition(s) which places this employee at an increased risk. See comments below for limitations:

Comments/ Limitations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

  
 Examining Provider

02/06/18  
 Date

Richard Kraus M.S., PA.-C  
 Midtown Occupational  
 Health Services, P.C.  
 2490 W. 26th Ave., Bldg. A, Suite 300  
 Denver, CO 80211  
 303-831-9393

### Respirator Fit Test

I, GEORGE THOMAS acknowledge that I have been fit tested and trained for the proper use and care of my respirator. I have read and understand JKS's written respiratory program manual.

Date of Fit Test: 5 7 18 Fit Test Conductor: Ruben Domingo

**Respirator Information**

- 1. Manufacturer: North
- 2. Model: 7700M
- 3. Size (Circle one):      SMALL          MEDIUM      LARGE
- 4. Approval Number: TC-84A-0592

Irritant smoke used (Circle one)?      YES          NO

Please initial the following as each test is completed:

- Breathe normally through the respirator
- Breathe deeply through the respirator. Be certain that your breaths are deep and regular
- Turn your head from one side to the other to the fullest extent about every second without bumping the respirator on your shoulders. Ensure that your movement is complete. Inhale on each side.
- Nod your head up and down to the fullest extent about every second without bumping the respirator on your chest. Ensure that your movement is complete and can be completed quickly. Inhale when you are facing up.
- Do several jumping jacks to ensure that the respirator does not come loose from your face.
- Move your mouth to its fullest extent; for example, yawn, move your jaw around, etc. Ensure that you can move your mouth as necessary without compromising the fit of the respirator.
- Read the Rainbow Passage  
 When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. A rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach his friends say he is looking for the pot of gold at the end of the rainbow.

Employee Signature: [Signature]

Date: 5.7.18

Fit Test Conductor Signature: [Signature]

Date: 5/07/18

Colorado Department  
of Public Health and  
Environment



Worker



Asbestos Certification

Monica E  
Barrientos L

Expires: 10/23/2019 Cert. #: 25053

Date Issued: 10/23/2018

# INTERNATIONAL

Environmental and Safety Training L.L.C.

720 Billings Street Unit F

Aurora, Colorado 80011

Phone # (720) 859-3134

Fax # (720) 859-0660



*CERTIFIES THAT*

**MONICA E. BARRIENTOS LEPRI**

Has successfully completed

The **EPA- APPROVED AHERA ASBESTOS COURSE** for **WORKER**

And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the  
**Toxic Substance Control Act (TSCA)**

Course Date 10/15/2018 - 10/18/2018  
Exam Date 10/18/2018  
No. Hours 32  
Certificate No CO101818-03AWI  
Expires 10/18/2019

This course meets the  
requirements of  
AQCC Reg. #8 Part B



Training Director

Invalid without raised seal

**Midtown Occupational Health Services**  
**2420 W. 26<sup>th</sup> Ave. Ste. 200-D Denver, CO 80211**  
**Phone: (303) 831-9393 Fax: (303) 831-6335**  
**OSHA Asbestos Certification**

Applicants Name Monica Barrantos

The above individual was seen by me on 10-19-18 in accordance to 29 CFR 1926.1101(Asbestos Certification) and 29CFR1910.134 (Respirator Certification). The following was performed:

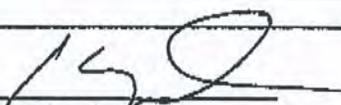
1.  Completion and review of the standardized medical questionnaire and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems per Appendix D in 1926.1101
2.  Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, and the personal protective and respiratory equipment to be utilized by this individual.
3.  Review of information from previous medical examinations, if available.
4.  A physical examination with emphasis upon the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1).
5.  Determined that a chest roentgenogram was  was not  required as part of this examination. (note: according to CFR 1926.1101 (M)(2)(ii)(C) it is at the discretion of the physician whether or not a chest X-ray is required)
6.  Reviewed OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2 in accordance with 29CFR 1910.134 and have determined that this individual may  may not  use a respiratory device while performing his/her required duties.
7.  The employee has been instructed to report any difficulties in using the respirators or any change of physical status to their supervisor or physician.
8.  In accordance with OSHA requirements, I have fully explained the results of the medical examination and laboratory tests to the above named patient.
9.  In accordance with OSHA I have informed this individual of the health risks involved with smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.

**Midtown Occupational Health Services**  
**2420 W. 26<sup>th</sup> Ave. Ste. 200-D Denver, CO 80211**  
**Phone: (303) 831-9393 Fax: (303) 831-6335**  
**OSHA Asbestos Certification**

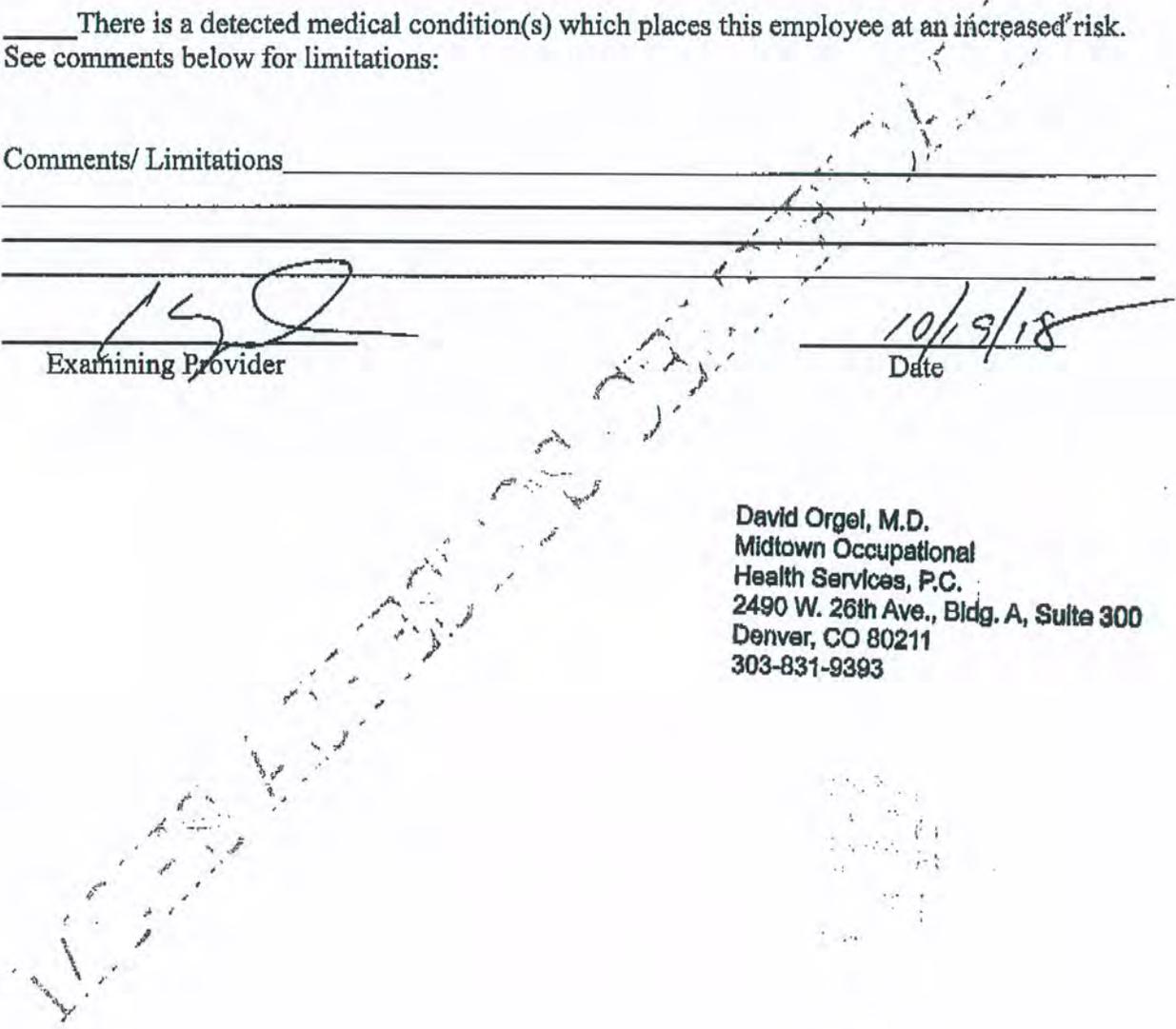
There is no detected medical condition which would place this employee at an increased risk of material health impairment from exposure to asbestos, and there are no recommended limitations on the employee concerning the use of personal protective equipment or respirator.

There is a detected medical condition(s) which places this employee at an increased risk. See comments below for limitations:

Comments/ Limitations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

  
 \_\_\_\_\_  
 Examining Provider

10/19/18  
 \_\_\_\_\_  
 Date



**David Orgel, M.D.**  
**Midtown Occupational**  
**Health Services, P.C.**  
**2490 W. 26th Ave., Bldg. A, Suite 300**  
**Denver, CO 80211**  
**303-831-9393**

### Respirator Fit Test

I, Mónica Barrientos, acknowledge that I have been fit tested and trained for the proper use and care of my respirator. I have read and understand JKS's written respiratory program manual.

Date of Fit Test: 10/24/18 Fit Test Conductor: Ruber Domingo

**Respirator Information**

- 1. Manufacturer: North
- 2. Model: 7700M
- 3. Size (Circle one):      SMALL      MEDIUM      LARGE
- 4. Approval Number: TC-84A-0592

Irritant smoke used (Circle one)?      YES      NO

Please initial the following as each test is completed:

- Breathe normally through the respirator
- Breathe deeply through the respirator. Be certain that your breaths are deep and regular
- Turn your head from one side to the other to the fullest extent about every second without bumping the respirator on your shoulders. Ensure that your movement is complete. Inhale on each side.
- Nod your head up and down to the fullest extent about every second without bumping the respirator on your chest. Ensure that your movement is complete and can be completed quickly. Inhale when you are facing up.
- Do several jumping jacks to ensure that the respirator does not come loose from your face.
- Move your mouth to its fullest extent; for example, yawn, move your jaw around, etc. Ensure that you can move your mouth as necessary without compromising the fit of the respirator.
- Read the Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. A rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach his friends say he is looking for the pot of gold at the end of the rainbow.

Employee Signature: Mónica Barrientos

Date: 10/24/18

Fit Test Conductor Signature: Ruber Domingo

Date: 10/24/2018

Colorado Department  
of Public Health and  
Environment



Worker



Asbestos Certification

Irina Blanco  
Belo

Expires: 11/20/2019 Cert. #:25136

Date Issued: 11/20/2018

# INTERNATIONAL

Environmental and Safety Training L.L.C.

720 Billings Street Unit F

Aurora, Colorado 80011

Phone # (720) 859-3134

Fax # (720) 859-0660



*CERTIFIES THAT*

## IRINA BLANCO BELLO

Has successfully completed

The **EPA- APPROVED AHERA ASBESTOS COURSE** for **WORKER**

And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the  
**Toxic Substance Control Act (TSCA)**

Course Date 11/12/2018 - 11/15/2018

Exam Date 11/15/2018

No. Hours 32

Certificate No CO111518-04AWI

Expires 11/15/2019

This course meets the  
requirements of  
AQCC Reg. #8 Part B



Invalid without raised seal

\_\_\_\_\_  
Training Director

Midtown Occupational Health Services  
2420 W. 26<sup>th</sup> Ave. Ste. 200-D Denver, CO 80211  
Phone: (303) 831-9393 Fax: (303) 831-6335  
OSHA Asbestos Certification

Applicants Name Irina Blanco

The above individual was seen by me on 11-19-18 in accordance to 29 CFR 1926.1101(Asbestos Certification) and 29CFR1910.134 (Respirator Certification). The following was performed:

1.  Completion and review of the standardized medical questionnaire and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems per Appendix D in 1926.1101
2.  Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, and the personal protective and respiratory equipment to be utilized by this individual.
3.  Review of information from previous medical examinations, if available.
4.  A physical examination with emphasis upon the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1).
5.  Determined that a chest roentgenogram was  was not  required as part of this examination. (note: according to CFR 1926.1101 (M)(2)(ii)(C) it is at the discretion of the physician whether or not a chest X-ray is required)
6.  Reviewed OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2 in accordance with 29CFR 1910.134 and have determined that this individual may  may not  use a respiratory device while performing his/her required duties.
7.  The employee has been instructed to report any difficulties in using the respirators or any change of physical status to their supervisor or physician.
8.  In accordance with OSHA requirements, I have fully explained the results of the medical examination and laboratory tests to the above named patient.
9.  In accordance with OSHA I have informed this individual of the health risks involved with smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.

Midtown Occupational Health Services  
2420 W. 26<sup>th</sup> Ave. Ste. 200-D Denver, CO 80211  
Phone: (303) 831-9393 Fax: (303) 831-6335  
OSHA Asbestos Certification

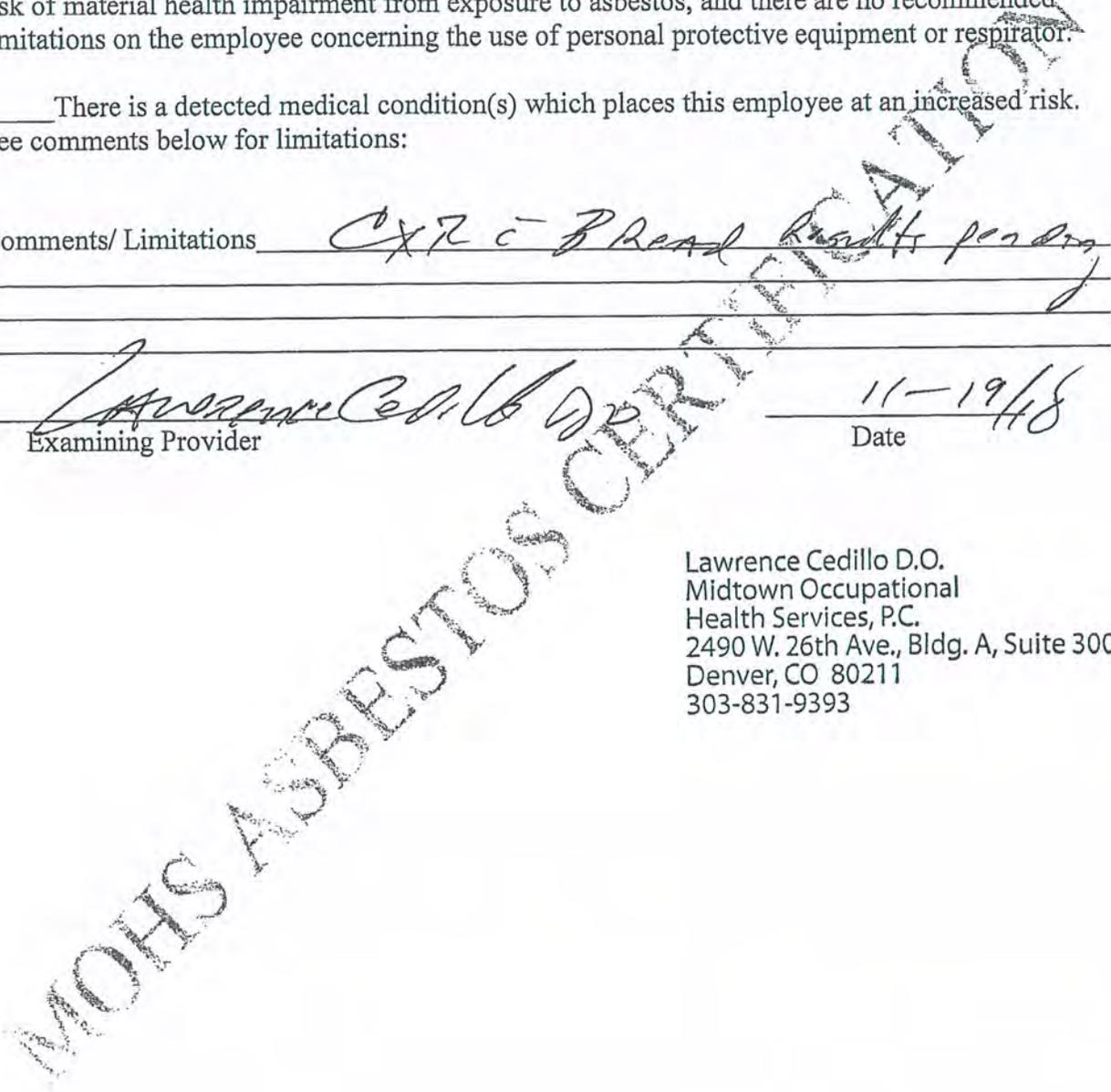
There is no detected medical condition which would place this employee at an increased risk of material health impairment from exposure to asbestos, and there are no recommended limitations on the employee concerning the use of personal protective equipment or respirator.

There is a detected medical condition(s) which places this employee at an increased risk. See comments below for limitations:

Comments/ Limitations CXR - B Read Results per org

Lawrence Cedillo D.O. Examining Provider 11-19-18 Date

Lawrence Cedillo D.O.  
Midtown Occupational  
Health Services, P.C.  
2490 W. 26th Ave., Bldg. A, Suite 300  
Denver, CO 80211  
303-831-9393



### Respirator Fit Test

I, Irina Blanco, acknowledge that I have been fit tested and trained for the proper use and care of my respirator. I have read and understand JKS's written respiratory program manual.

Date of Fit Test: 11/26/2018 Fit Test Conductor: Jake Downing

**Respirator Information**

- 1. Manufacturer: North
- 2. Model: 7700M
- 3. Size (Circle one):      SMALL      MEDIUM      LARGE
- 4. Approval Number: TC-84A-0592

Irritant smoke used (Circle one)?      YES      NO

Please initial the following as each test is completed:

- Breathe normally through the respirator
- Breathe deeply through the respirator. Be certain that your breaths are deep and regular
- Turn your head from one side to the other to the fullest extent about every second without bumping the respirator on your shoulders. Ensure that your movement is complete. Inhale on each side.
- Nod your head up and down to the fullest extent about every second without bumping the respirator on your chest. Ensure that your movement is complete and can be completed quickly. Inhale when you are facing up.
- Do several jumping jacks to ensure that the respirator does not come loose from your face.
- Move your mouth to its fullest extent; for example, yawn, move your jaw around, etc. Ensure that you can move your mouth as necessary without compromising the fit of the respirator.
- Read the Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. A rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach his friends say he is looking for the pot of gold at the end of the rainbow.

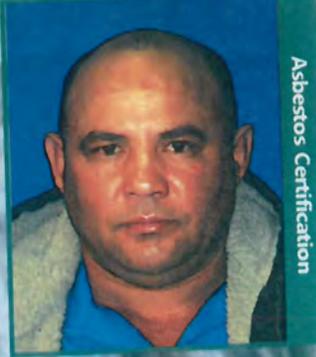
Employee Signature: Irina Blanco  
 Fit Test Conductor Signature: Jake Downing

Date: 11-26-2018  
 Date: 11/26/2018

Colorado Department  
of Public Health and  
Environment



Worker



Asbestos Certification

**Eutiquio  
Dominguez-Batista**

Expires: 11/20/2019 Cert. #: 25135  
Date Issued: 11/20/2018

# INTERNATIONAL

Environmental and Safety Training L.L.C.

720 Billings Street Unit F

Aurora, Colorado 80011

Phone # (720) 859-3134

Fax # (720) 859-0660



*CERTIFIES THAT*

## EUTIQUIO DOMINGUEZ BATISTA

Has successfully completed  
The **EPA- APPROVED AHERA ASBESTOS COURSE** for **WORKER**  
And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the  
**Toxic Substance Control Act (TSCA)**

Course Date 11/12/2018 - 11/15/2018

Exam Date 11/15/2018

No. Hours 32

Certificate No CO111518-03AWI

Expires 11/15/2019

This course meets the  
requirements of  
AQCC Reg. #8 Part B



Invalid without raised seal

A handwritten signature in black ink, appearing to read 'H. Cuevas'.

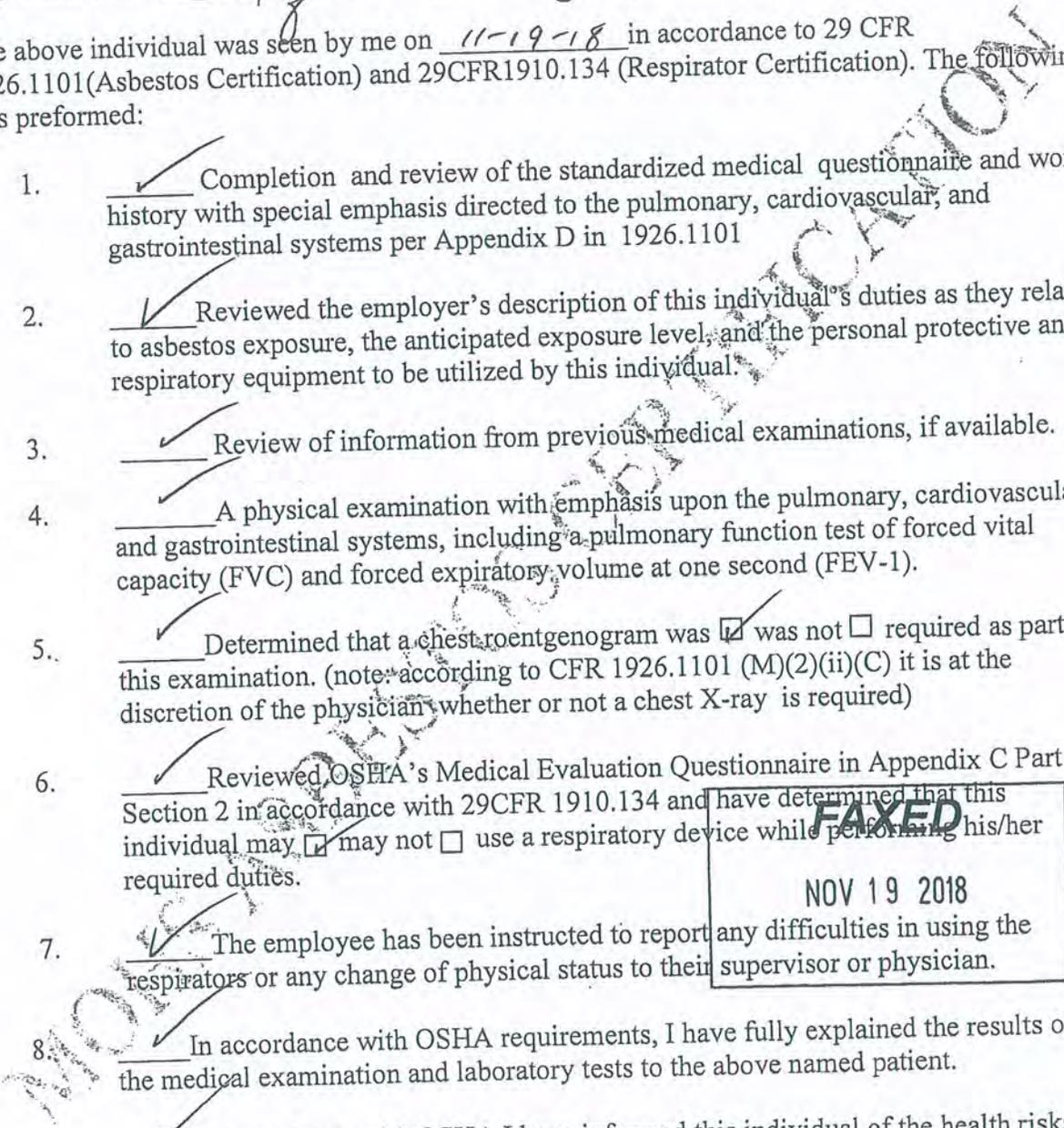
Training Director

Midtown Occupational Health Services  
2420 W. 26<sup>th</sup> Ave. Ste. 200-D Denver, CO 80211  
Phone: (303) 831-9393 Fax: (303) 831-6335  
OSHA Asbestos Certification

Applicants Name Eduardo Dominguez

The above individual was seen by me on 11-19-18 in accordance to 29 CFR 1926.1101(Asbestos Certification) and 29CFR1910.134 (Respirator Certification). The following was performed:

1.  Completion and review of the standardized medical questionnaire and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems per Appendix D in 1926.1101
2.  Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, and the personal protective and respiratory equipment to be utilized by this individual.
3.  Review of information from previous medical examinations, if available.
4.  A physical examination with emphasis upon the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1).
5.  Determined that a chest roentgenogram was  was not  required as part of this examination. (note: according to CFR 1926.1101 (M)(2)(ii)(C) it is at the discretion of the physician whether or not a chest X-ray is required)
6.  Reviewed OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2 in accordance with 29CFR 1910.134 and have determined that this individual may  may not  use a respiratory device while performing his/her required duties.
7.  The employee has been instructed to report any difficulties in using the respirators or any change of physical status to their supervisor or physician.
8.  In accordance with OSHA requirements, I have fully explained the results of the medical examination and laboratory tests to the above named patient.
9.  In accordance with OSHA I have informed this individual of the health risks involved with smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.



**FAXED**  
NOV 19 2018

Midtown Occupational Health Services  
2420 W. 26<sup>th</sup> Ave. Ste. 200-D Denver, CO 80211  
Phone: (303) 831-9393 Fax: (303) 831-6335  
OSHA Asbestos Certification

   There is no detected medical condition which would place this employee at an increased risk of material health impairment from exposure to asbestos, and there are no recommended limitations on the employee concerning the use of personal protective equipment or respirator.

   There is a detected medical condition(s) which places this employee at an increased risk. See comments below for limitations:

Comments/ Limitations CXR - B-Read - Results pending

Lawrence Cedillo  
Examining Provider

11-19-18  
Date

Lawrence Cedillo D.O.  
Midtown Occupational  
Health Services, P.C.  
2490 W. 26th Ave., Bldg. A, Suite 300  
Denver, CO 80211  
303-831-9393

MIDTOWN OCCUPATIONAL HEALTH SERVICES  
OSHA ASBESTOS CERTIFICATION

**FAXED**  
NOV 19 2018

### Respirator Fit Test

I, Esteban Dominguez, acknowledge that I have been fit tested and trained for the proper use and care of my respirator. I have read and understand JKS's written respiratory program manual.

Date of Fit Test: 11/26/2018 Fit Test Conductor: John Dominguez

**Respirator Information**

1. Manufacturer: North
2. Model: 7700M
3. Size (Circle one):      SMALL      ~~MEDIUM~~      LARGE
4. Approval Number: TC-84A-0592

Irritant smoke used (Circle one)?      YES      NO

Please initial the following as each test is completed:

- Breathe normally through the respirator
- Breathe deeply through the respirator. Be certain that your breaths are deep and regular
- Turn your head from one side to the other to the fullest extent about every second without bumping the respirator on your shoulders. Ensure that your movement is complete. Inhale on each side.
- Nod your head up and down to the fullest extent about every second without bumping the respirator on your chest. Ensure that your movement is complete and can be completed quickly. Inhale when you are facing up.
- Do several jumping jacks to ensure that the respirator does not come loose from your face.
- Move your mouth to its fullest extent; for example, yawn, move your jaw around, etc. Ensure that you can move your mouth as necessary without compromising the fit of the respirator.
- Read the Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. A rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach his friends say he is looking for the pot of gold at the end of the rainbow.

Employee Signature: Esteban Dominguez  
 Fit Test Conductor Signature: \_\_\_\_\_

Date: 11/26/2018  
 Date: 11/26/2018

Colorado Department  
of Public Health and  
Environment



Worker



Asbestos Certification

Ramira  
Duran

Expires: 10/23/2019 Cert. #: 25056

Date Issued: 10/23/2018

# INTERNATIONAL

Environmental and Safety Training L.L.C.

720 Billings Street Unit F

Aurora, Colorado 80011

Phone # (720) 859-3134

Fax # (720) 859-0660



*CERTIFIES THAT*

**RAMIRA DEL VALLE DURAN MARQUINA**

Has successfully completed

The **EPA- APPROVED AHERA ASBESTOS COURSE** for **WORKER**

And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the  
**Toxic Substance Control Act (TSCA)**

Course Date 10/15/2018 - 10/18/2018

Exam Date 10/18/2018

No. Hours 32

Certificate No CO101818-07AWI

Expires 10/18/2019

This course meets the  
requirements of  
AQCC Reg. #8 Part B



Invalid without raised seal

Training Director

Midtown Occupational Health Services  
2420 W. 26<sup>th</sup> Ave. Ste. 200-D Denver, CO 80211  
Phone: (303) 831-9393 Fax: (303) 831-6335  
OSHA Asbestos Certification

Applicants Name Ramira Duran

The above individual was seen by me on 10-19-18 in accordance to 29 CFR 1926.1101 (Asbestos Certification) and 29CFR1910.134 (Respirator Certification). The following was performed:

1.  Completion and review of the standardized medical questionnaire and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems per Appendix D in 1926.1101
2.  Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, and the personal protective and respiratory equipment to be utilized by this individual.
3.  Review of information from previous medical examinations, if available.
4.  A physical examination with emphasis upon the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1).
5.  Determined that a chest roentgenogram was  was not  required as part of this examination. (note: according to CFR 1926.1101 (M)(2)(ii)(C) it is at the discretion of the physician, whether or not a chest X-ray is required)
6.  Reviewed OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2 in accordance with 29CFR 1910.134 and have determined that this individual may  may not  use a respiratory device while performing his/her required duties.
7.  The employee has been instructed to report any difficulties in using the respirators or any change of physical status to their supervisor or physician.
8.  In accordance with OSHA requirements, I have fully explained the results of the medical examination and laboratory tests to the above named patient.
9.  In accordance with OSHA I have informed this individual of the health risks involved with smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.

**Midtown Occupational Health Services**  
 2420 W. 26<sup>th</sup> Ave. Ste. 200-D Denver, CO 80211  
 Phone: (303) 831-9393 Fax: (303) 831-6335  
**OSHA Asbestos Certification**

There is no detected medical condition which would place this employee at an increased risk of material health impairment from exposure to asbestos, and there are no recommended limitations on the employee concerning the use of personal protective equipment or respirator.

There is a detected medical condition(s) which places this employee at an increased risk. See comments below for limitations:

Comments/ Limitations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

  
 Examining Provider

10/17/18  
 Date

**Kirk Holmboe, D.O.**  
**Midtown Occupational**  
**Health Services, P.C.**  
 2490 W. 26th Ave., Bldg. A, Suite 300  
 Denver, CO 80211  
 303-831-9393

*MIDTOWN OCCUPATIONAL HEALTH SERVICES*

Respirator Fit Test

I, Raissa Duran, acknowledge that I have been fit tested and trained for the proper use and care of my respirator. I have read and understand JKS's written respiratory program manual.

Date of Fit Test: 10/24/2018 Fit Test Conductor: [Signature]

Respirator Information

- 1. Manufacturer: North
- 2. Model: 7700M
- 3. Size (Circle one): SMALL MEDIUM LARGE
- 4. Approval Number: TC-84A-0592

Irritant smoke used (Circle one)? YES NO

Please initial the following as each test is completed:

- Breathe normally through the respirator
- Breathe deeply through the respirator. Be certain that your breaths are deep and regular
- Turn your head from one side to the other to the fullest extent about every second without bumping the respirator on your shoulders. Ensure that your movement is complete. Inhale on each side.
- Nod your head up and down to the fullest extent about every second without bumping the respirator on your chest. Ensure that your movement is complete and can be completed quickly. Inhale when you are facing up.
- Do several jumping jacks to ensure that the respirator does not come loose from your face.
- Move your mouth to its fullest extent; for example, yawn, move your jaw around, etc. Ensure that you can move your mouth as necessary without compromising the fit of the respirator.
- Read the Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. A rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach his friends say he is looking for the pot of gold at the end of the rainbow.

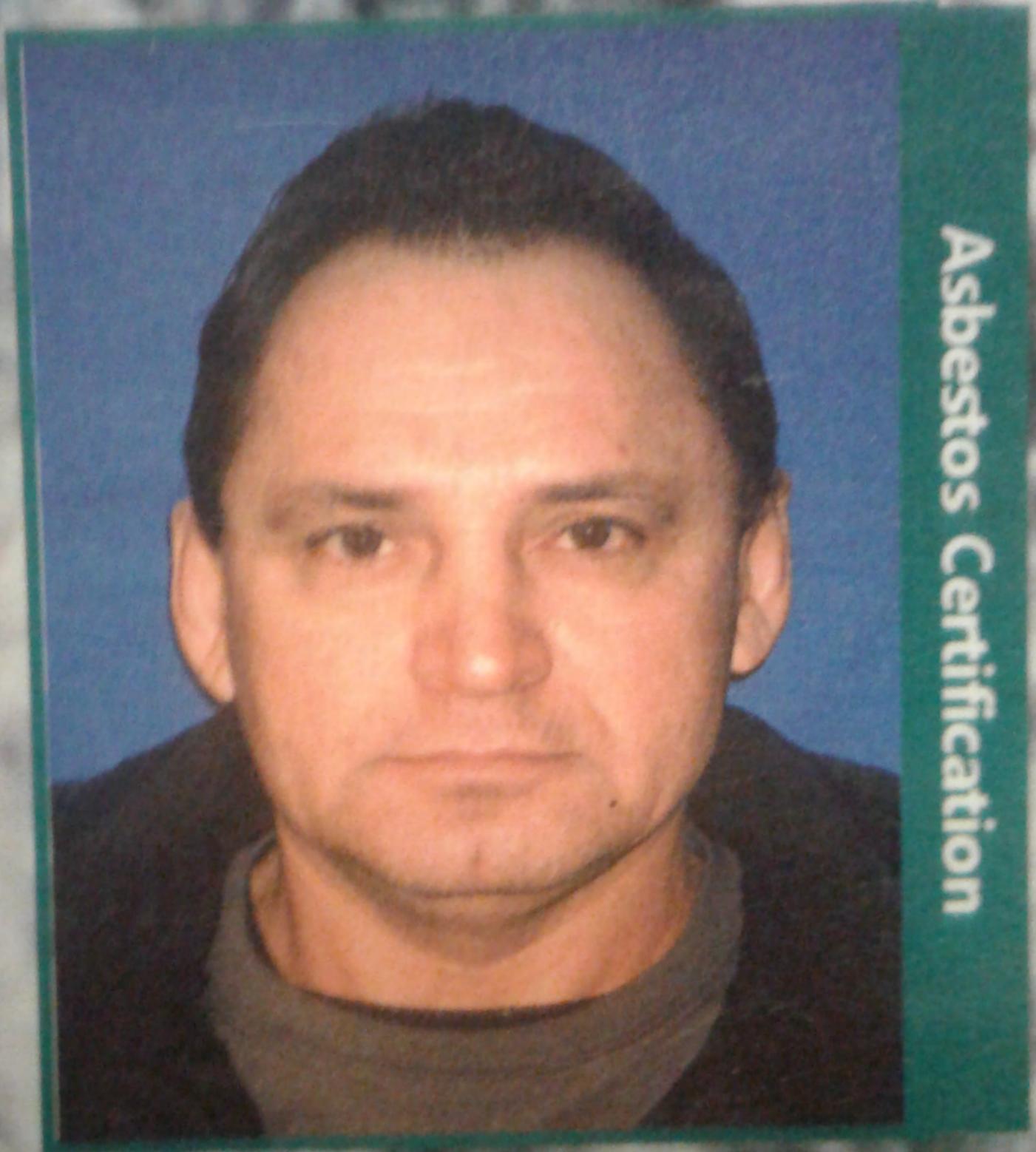
Employee Signature: Raissa Duran  
Fit Test Conductor Signature: [Signature]

Date: 10/24/18  
Date: 10/24/2018

Colorado Department  
of Public Health and  
Environment



Worker



Asbestos Certification

Ricardo  
Fuerte

Expires: 10/23/2019 Cert. #: 25051

Date Issued: 10/23/2018

# INTERNATIONAL

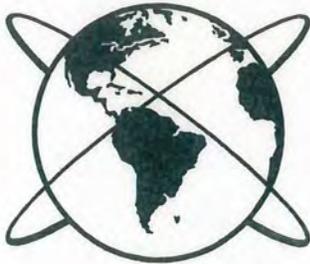
Environmental and Safety Training L.L.C.

720 Billings Street Unit F

Aurora, Colorado 80011

Phone # (720) 859-3134

Fax # (720) 859-0660



*CERTIFIES THAT*

**RICARDO FUERTE MESA**

Has successfully completed  
The **EPA- APPROVED AHERA ASBESTOS COURSE** for **WORKER**  
And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the  
**Toxic Substance Control Act (TSCA)**

Course Date 10/15/2018 - 10/18/2018

Exam Date 10/18/2018

No. Hours 32

Certificate No CO101818-04AWI

Expires 10/18/2019

This course meets the  
requirements of  
AQCC Reg. #8 Part B



Invalid without raised seal

Training Director

# Colorado Occupational Medical Partners

1390 S. Potomac St. Suite 136  
Aurora, Co. 80012  
Ph# 303.214.0000 Fax# 303.214.0326

## PHYSICIAN'S WRITTEN OPINION - ASBESTOS

Applicant's Name: Ricardo Fuente

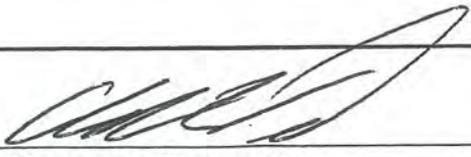
Address: \_\_\_\_\_

The above named was seen by me on 10/22/18, and in accordance with all applicable portions of OSHA's Asbestos Standard for the Construction Industry, 29 CFR 1926.1101, with which I am familiar, I have indicated by my initials, that I have performed the following.

1.  Reviewed with this individual, his/her completed OSHA standardized Medical Questionnaire and Work History, directed towards the pulmonary, cardiovascular, and gastrointestinal, system; and
2.  Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, the personal protective and respiratory equipment to be utilized by the individual; and any additional medical information resulting from previous examinations; and
3.  Conducted a physical examination of this individual with emphasis on the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1) and
4.  Determined that a chest roentgenogram was \_\_\_ was not  required as a part of this examination. (If required, the x-ray was taken and read in accordance with Appendix E of the Asbestos Standard); and
5.  Determined that this individual may  may not \_\_\_ use a respiratory device while performing his/her required employment services; and
6.  Informed this individual that I have \_\_\_ have not  detected a medical condition which would place this individual at an increased risk of material health impairment from exposure to asbestos; and
7.  Informed this individual of the results of my examination and of any medical condition that may result from this individual's exposure to asbestos; and
8.  Informed this individual of the health risks involved in smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.

Comments and/or Limitations (if any):

Charles Wenzel, DO  
(Physician's Printed Name)

  
(Physician's Signature)

Colorado Occupational Medical Partners  
1390 S. Potomac St. Suite 136 Aurora, CO 80012  
P:303-214-0000 F:303-214-0335  
(Physician's Phone No.)

\_\_\_\_\_  
(Physician's Address)

### Respirator Fit Test

I, Ricardo Fuerte, acknowledge that I have been fit tested and trained for the proper use and care of my respirator. I have read and understand JKS's written respiratory program manual.

Date of Fit Test: 10/24/18 Fit Test Conductor: Ruber Doming

#### Respirator Information

- 1. Manufacturer: North
- 2. Model: 7700M
- 3. Size (Circle one):      SMALL      MEDIUM      LARGE
- 4. Approval Number: TC-84A-0592

Irritant smoke used (Circle one)?      YES      NO

Please initial the following as each test is completed:

- Breathe normally through the respirator
- Breathe deeply through the respirator. Be certain that your breaths are deep and regular
- Turn your head from one side to the other to the fullest extent about every second without bumping the respirator on your shoulders. Ensure that your movement is complete. Inhale on each side.
- Nod your head up and down to the fullest extent about every second without bumping the respirator on your chest. Ensure that your movement is complete and can be completed quickly. Inhale when you are facing up.
- Do several jumping jacks to ensure that the respirator does not come loose from your face.
- Move your mouth to its fullest extent; for example, yawn, move your jaw around, etc. Ensure that you can move your mouth as necessary without compromising the fit of the respirator.
- Read the Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. A rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach his friends say he is looking for the pot of gold at the end of the rainbow.

Employee Signature: [Signature]

Date: 10/24/18

Fit Test Conductor Signature: [Signature]

Date: 10/24/2018

Colorado Department  
of Public Health and  
Environment



Worker



Asbestos Certification

Jean Carlos  
Leccia-Coa

Expires: 6/20/2019 Cert. #: 24687

Date Issued: 6/20/2018

# INTERNATIONAL

Environmental and Safety Training L.L.C.

720 Billings Street Unit F

Aurora, Colorado 80011

Phone # (720) 859-3134

Fax # (720) 859-0660



*CERTIFIES THAT*

**JEAN CARLOS LECCIA COA**

Has successfully completed

The **EPA- APPROVED AHERA ASBESTOS COURSE** for **WORKER**

And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the  
**Toxic Substance Control Act (TSCA)**

Course Date 06/11/2018 - 06/14/2018

Exam Date 06/14/2018

No. Hours 32

Certificate No CO061418-07AWI

Expires 06/14/2019

This course meets the  
requirements of  
AQCC Reg. #8 Part B



Invalid without raised seal

Training Director

**Midtown Occupational Health Services**  
**2420 W. 26<sup>th</sup> Ave. Ste. 200-D Denver, CO 80211**  
**Phone: (303) 831-9393 Fax: (303) 831-6335**  
**OSHA Asbestos Certification**

Applicants Name Jean Carlos Leccia

The above individual was seen by me on 6-18-78 in accordance to 29 CFR 1926.1101(Asbestos Certification) and 29CFR1910.134 (Respirator Certification). The following was performed:

1.  Completion and review of the standardized medical questionnaire and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems per Appendix D in 1926.1101
2.  Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, and the personal protective and respiratory equipment to be utilized by this individual.
3.  Review of information from previous medical examinations, if available.
4.  A physical examination with emphasis upon the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1).
5.  Determined that a chest roentgenogram was  was not  required as part of this examination. (note according to CFR 1926.1101 (M)(2)(ii)(C) it is at the discretion of the physician whether or not a chest X-ray is required)
6.  Reviewed OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2 in accordance with 29CFR 1910.134 and have determined that this individual may  may not  use a respiratory device while performing his/her required duties.
7.  The employee has been instructed to report any difficulties in using the respirators or any change of physical status to their supervisor or physician.
8.  In accordance with OSHA requirements, I have fully explained the results of the medical examination and laboratory tests to the above named patient.
9.  In accordance with OSHA I have informed this individual of the health risks involved with smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.

**Midtown Occupational Health Services**  
**2420 W. 26<sup>th</sup> Ave. Ste. 200-D Denver, CO 80211**  
**Phone: (303) 831-9393 Fax: (303) 831-6335**  
**OSHA Asbestos Certification**

There is no detected medical condition which would place this employee at an increased risk of material health impairment from exposure to asbestos, and there are no recommendations.

Comments/ Limitations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Examining Provider *J. Raschbacher* \_\_\_\_\_ Date \_\_\_\_\_  
**J. Raschbacher, M.D.**

J. Raschbacher, M.D.  
 Midtown Occupational  
 Health Services, P.C.  
 2490 W. 26th Ave., Bldg. A, Suite 300  
 Denver, CO 80211  
 303-831-9393

### Midtown Occupational Health Services

2490 W 26th Avenue  
 Building A, Suite 300  
 Denver, CO 80211

**Leclla Coa, Jean Carlos**

**ID: 1993 Age: 25 (5/12/1993)**

Gender	Male	Height	71 in	Asthma	No
Ethnicity	Hispanic	Weight	274 lb	BMI	38.2
Smoker	No			COPD	--

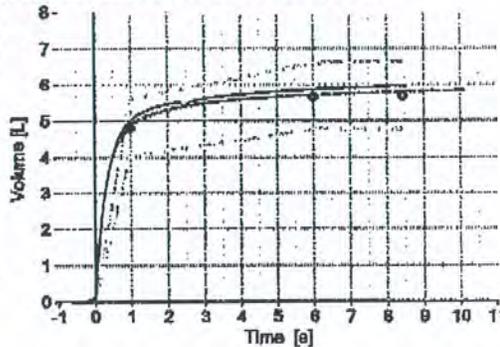
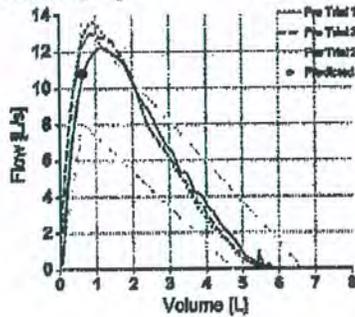
**FVC (ex only)**

**Your FEV1 / Predicted: 104%**

Test Date	6/18/2018 11:44:10 AM	Interpretation	--	Value Selection	Best Value
Post Time		Predicted	Hankinson (NHANES III), 1999	BTPS (IN/EX)	1.11/1.02

Parameter	Pred	LLN	Pre				%Pred
			Best	Trial 1	Trial 3	Trial 2	
FVC [L]	5.70	4.76	5.95	5.95	5.82	5.82	104
FEV1 [L]	4.81	4.02	5.01	5.01	4.86	4.81	104
FEV1/FVC [%]	84.5	75.4	84.1	84.1	83.4	82.6	100
FEF25-75 [L/s]	5.20	3.43	5.62	5.62	5.32	5.05	108
PEF [L/s]	10.82	8.09	13.62	12.23	12.95	13.62	126
FET [s]	-	-	8.4	8.4	10.2	10.1	-

Session Quality Pre C (FEV1 Var=0.15L (3.0%); FVC Var=0.19L (2.2%))



### Respirator Fit Test

I, Juan Carlos Leccia Coa, acknowledge that I have been fit tested and trained for the proper use and care of my respirator. I have read and understand JKS's written respiratory program manual.

Date of Fit Test: 6/21/2018 Fit Test Conductor: Ruben Lopez

#### Respirator Information

- 1. Manufacturer: North
- 2. Model: 7700M
- 3. Size (Circle one):      SMALL                  MEDIUM                  **LARGE**
- 4. Approval Number: TC-84A-0592

Irritant/smoke used (Circle one)?      **YES**                  NO

Please initial the following as each test is completed:

- Breathe normally through the respirator
- Breathe deeply through the respirator. Be certain that your breaths are deep and regular
- Turn your head from one side to the other to the fullest extent about every second without bumping the respirator on your shoulders. Ensure that your movement is complete. Inhale on each side.
- Nod your head up and down to the fullest extent about every second without bumping the respirator on your chest. Ensure that your movement is complete and can be completed quickly. Inhale when you are facing up.
- Do several jumping jacks to ensure that the respirator does not come loose from your face.
- Move your mouth to its fullest extent; for example, yawn, move your jaw around, etc. Ensure that you can move your mouth as necessary without compromising the fit of the respirator.
- Read the Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. A rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach his friends say he is looking for the pot of gold at the end of the rainbow.

Employee Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Fit Test Conductor Signature: \_\_\_\_\_

Date: 6/21/2018

Colorado Department  
of Public Health and  
Environment



Worker



Asbestos Certification

Tania  
Padron

Expires: 10/23/2019 Cert. #: 25052

Date Issued: 10/23/2018

# INTERNATIONAL

Environmental and Safety Training L.L.C.

720 Billings Street Unit F

Aurora, Colorado 80011

Phone # (720) 859-3134

Fax # (720) 859-0660



*CERTIFIES THAT*

**TANIA PADRON**

Has successfully completed

The **EPA- APPROVED AHERA ASBESTOS COURSE** for **WORKER**

And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the  
**Toxic Substance Control Act (TSCA)**

Course Date      10/15/2018 - 10/18/2018  
Exam Date        10/18/2018  
No. Hours        32  
Certificate No    CO101818-06AWI  
Expires           10/18/2019

This course meets the  
requirements of  
AQCC Reg. #8 Part B



Invalid without raised seal

A handwritten signature in black ink, appearing to read "T. Padron".

Training Director

# Colorado Occupational Medical Partners

1390 S. Potomac St. Suite 136  
Aurora, Co. 80012  
Ph# 303.214.0000 Fax# 303.214.0326

## PHYSICIAN'S WRITTEN OPINION - ASBESTOS

Applicant's Name: Tania Padron

Address: \_\_\_\_\_

The above named was seen by me on 10/22/18, and in accordance with all applicable portions of OSHA's Asbestos Standard for the Construction Industry, 29 CFR 1926.1101, with which I am familiar, I have indicated by my initials, that I have performed the following.

1.  Reviewed with this individual, his/her completed OSHA standardized Medical Questionnaire and Work History, directed towards the pulmonary, cardiovascular, and gastrointestinal, system; and
2.  Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, the personal protective and respiratory equipment to be utilized by the individual; and any additional medical information resulting from previous examinations; and
3.  Conducted a physical examination of this individual with emphasis on the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1) and
4.  Determined that a chest roentgenogram was \_\_\_ was not  required as a part of this examination. (If required, the x-ray was taken and read in accordance with Appendix E of the Asbestos Standard); and
5.  Determined that this individual may  may not \_\_\_ use a respiratory device while performing his/her required employment services; and
6.  Informed this individual that I have \_\_\_ have not  detected a medical condition which would place this individual at an increased risk of material health impairment from exposure to asbestos; and
7.  Informed this individual of the results of my examination and of any medical condition that may result from this individual's exposure to asbestos; and
8.  Informed this individual of the health risks involved in smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.

Comments and/or Limitations (if any):

Charles Weazel, DO  
(Physician's Printed Name)

[Signature]  
(Physician's Signature)

Colorado Occupational Medical Partners  
1390 S. Potomac St. Suite 136 Aurora, CO 80012  
P:303-214-0000 F:303-214-0335

\_\_\_\_\_  
(Physician's Phone No.)

\_\_\_\_\_  
(Physician's Address)

### Respirator Fit Test

I, Tania padron, acknowledge that I have been fit tested and trained for the proper use and care of my respirator. I have read and understand JKS's written respiratory program manual.

Date of Fit Test: 10/24/18 Fit Test Conductor: Ruben Domingo

**Respirator Information**

1. Manufacturer: North
2. Model: 7700M
3. Size (Circle one):      SMALL      MEDIUM      LARGE
4. Approval Number: TC-84A-0592

Irritant smoke used (Circle one)?      YES      NO

Please initial the following as each test is completed:

- Breathe normally through the respirator
- Breathe deeply through the respirator. Be certain that your breaths are deep and regular
- Turn your head from one side to the other to the fullest extent about every second without bumping the respirator on your shoulders. Ensure that your movement is complete. Inhale on each side.
- Nod your head up and down to the fullest extent about every second without bumping the respirator on your chest. Ensure that your movement is complete and can be completed quickly. Inhale when you are facing up.
- Do several jumping jacks to ensure that the respirator does not come loose from your face.
- Move your mouth to its fullest extent; for example, yawn, move your jaw around, etc. Ensure that you can move your mouth as necessary without compromising the fit of the respirator.
- Read the Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. A rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach his friends say he is looking for the pot of gold at the end of the rainbow.

Employee Signature: *Tania Padron*

Date: 10/24/18

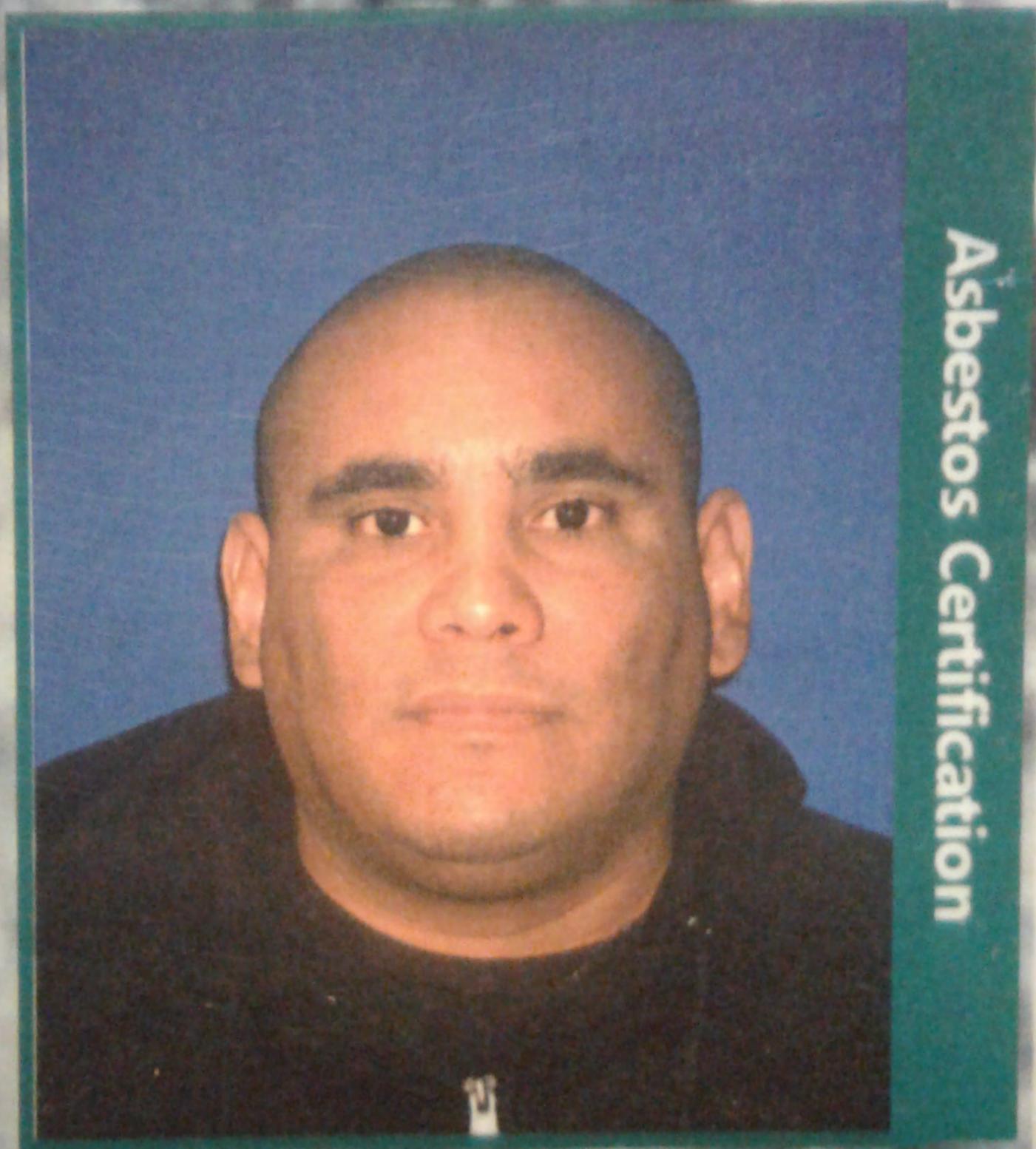
Fit Test Conductor Signature: *Ruben Domingo*

Date: 10/24/2018

Colorado Department  
of Public Health and  
Environment



Worker



Asbestos Certification

**Alfredo E  
Rincon B**

Expires: 10/23/2019 Cert. #: 25054

Date Issued: 10/23/2018

# INTERNATIONAL

Environmental and Safety Training L.L.C.  
720 Billings Street Unit F  
Aurora, Colorado 80011  
Phone # (720) 859-3134  
Fax # (720) 859-0660



*CERTIFIES THAT*

**ALFREDO E. RINCON B.**

Has successfully completed  
The **EPA- APPROVED AHERA ASBESTOS COURSE** for **WORKER**  
And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the  
**Toxic Substance Control Act (TSCA)**

Course Date 10/15/2018 - 10/18/2018

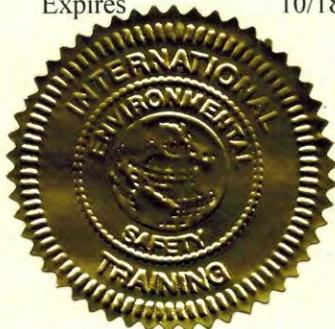
Exam Date 10/18/2018

No. Hours 32

Certificate No CO101818-01AWI

Expires 10/18/2019

This course meets the  
requirements of  
AQCC Reg. #8 Part B



Invalid without raised seal

A handwritten signature in black ink, appearing to read 'F. Cuervo'.

Training Director

Midtown Occupational Health Services  
 2420 W. 26<sup>th</sup> Ave. Ste. 200-D Denver, CO 80211  
 Phone: (303) 831-9393 Fax: (303) 831-6335  
 OSHA Asbestos Certification

Applicants Name Alfredo Rincon

The above individual was seen by me on 10/9/18 in accordance to 29 CFR 1926.1101(Asbestos Certification) and 29CFR1910.134 (Respirator Certification). The following was performed:

1.  Completion and review of the standardized medical questionnaire and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems per Appendix D in 1926.1101
2.  Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, and the personal protective and respiratory equipment to be utilized by this individual.
3.  Review of information from previous medical examinations, if available.
4.  A physical examination with emphasis upon the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1).
5.  Determined that a chest roentgenogram was  was not  required as part of this examination. (note: according to CFR 1926.1101 (M)(2)(ii)(C) it is at the discretion of the physician whether or not a chest X-ray is required) *A + P B-reader*
6.  Reviewed OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2 in accordance with 29CFR 1910.134 and have determined that this individual may  may not  use a respiratory device while performing his/her required duties.
7. The employee has been instructed to report any difficulties in using the respirators or any change of physical status to their supervisor or physician.
8. In accordance with OSHA requirements, I have fully explained the results of the medical examination and laboratory tests to the above named patient.
9. In accordance with OSHA I have informed this individual of the health risks involved with smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.

Midtown Occupational Health Services  
 2420 W. 26<sup>th</sup> Ave. Ste. 200-D Denver, CO 80211  
 Phone: (303) 831-9393 Fax: (303) 831-6335  
**OSHA Asbestos Certification**

There is no detected medical condition which would place this employee at an increased risk of material health impairment from exposure to asbestos, and there are no recommended limitations on the employee concerning the use of personal protective equipment or respirator.

There is a detected medical condition(s) which places this employee at an increased risk. See comments below for limitations:

Comments/ Limitations

No restrictions

*[Handwritten Signature]*

Examining Provider

10/19/18  
Date

MOHS ASBESTOS CERTIFICATION

Lon Noel, M.D.  
 Midtown Occupational  
 Health Services, P.C.  
 2490 W. 26th Ave., Bldg. A, Suite 300  
 Denver, CO 80211  
 303-831-9393

### Respirator Fit Test

I, Alfredo Rincon, acknowledge that I have been fit tested and trained for the proper use and care of my respirator. I have read and understand JKS's written respiratory program manual.

Date of Fit Test: 10/24/18 Fit Test Conductor: Ruber Dominguez

#### Respirator Information

- 1. Manufacturer: North
- 2. Model: 7700M
- 3. Size (Circle one):      SMALL      MEDIUM      LARGE
- 4. Approval Number: TC-84A-0592

Irritant smoke used (Circle one)?      YES      NO

Please initial the following as each test is completed:

- Breathe normally through the respirator
- Breathe deeply through the respirator. Be certain that your breaths are deep and regular
- Turn your head from one side to the other to the fullest extent about every second without bumping the respirator on your shoulders. Ensure that your movement is complete. Inhale on each side.
- Nod your head up and down to the fullest extent about every second without bumping the respirator on your chest. Ensure that your movement is complete and can be completed quickly. Inhale when you are facing up.
- Do several jumping jacks to ensure that the respirator does not come loose from your face.
- Move your mouth to its fullest extent; for example, yawn, move your jaw around, etc. Ensure that you can move your mouth as necessary without compromising the fit of the respirator.
- Read the Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. A rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach his friends say he is looking for the pot of gold at the end of the rainbow.

Employee Signature: [Signature]

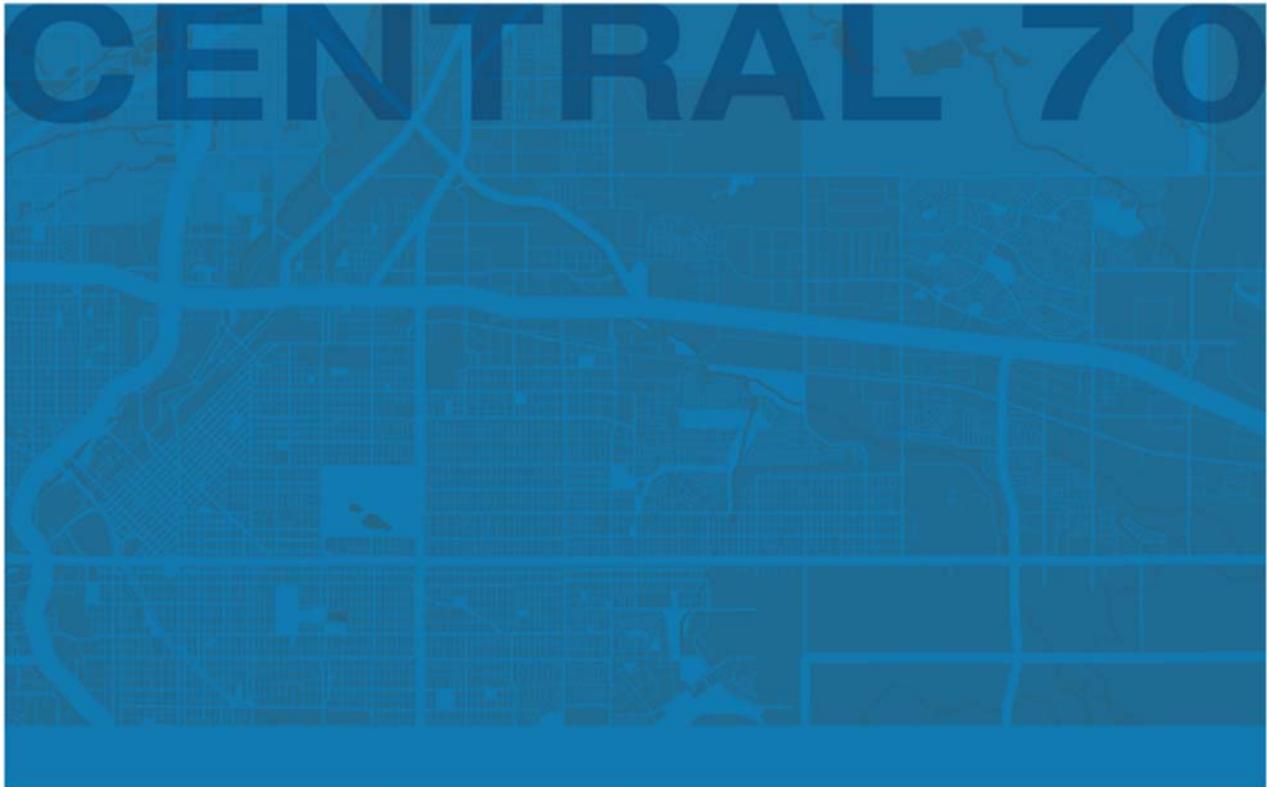
Date: 10/24/18

Fit Test Conductor Signature: [Signature]

Date: 10/24/2018

## 6. Project Design

## 6a. SSAR



September 21, 2018



## **Structure Survey Assessment Report AP-73**

4600 Clayton Street

Denver, CO 80216

## TABLE OF CONTENTS

### Contents

<b>1</b>	<b>Introduction</b> .....	<b>1</b>
<b>2</b>	<b>Site Survey Methodology</b> .....	<b>2</b>
2.1	Asbestos Survey.....	2
2.2	Lead-Based Paint Survey.....	2
2.3	Survey Of Suspected RBMS .....	3
<b>3</b>	<b>Findings</b> .....	<b>4</b>
3.1	Asbestos Survey.....	4
3.2	Lead-Based Paint Survey.....	4
3.2.1	<i>TCLP Lead Analytical Results</i> .....	5
3.3	Regulated Building Materials Inventory Survey.....	5
<b>4</b>	<b>Conclusions and Recommendations</b> .....	<b>6</b>
4.1	Asbestos.....	6
4.2	Lead-Based Paint.....	6
4.3	Regulated Building Materials.....	7
<b>5</b>	<b>Limitations</b> .....	<b>8</b>
	<b>Tables</b> .....	<b>9</b>
	<b>Figures</b> .....	<b>10</b>

## LIST OF REPORT ACRONYMS/ABBREVIATIONS

<b>ACMs</b>	Asbestos Containing Materials
<b>AHERA</b>	Asbestos Hazard Emergency Response Act
<b>APEC</b>	All-Phase Environmental Consultants
<b>AMS</b>	Air Monitoring Specialist
<b>CABI</b>	Colorado Asbestos Building Inspector
<b>CDOT</b>	Colorado Department of Transportation
<b>CDPHE</b>	Colorado Department of Public Health and Environment
<b>CFCs</b>	Chlorofluorocarbons
<b>CFR</b>	Code of Federal Regulations
<b>EP</b>	Environmental Professional
<b>EPA</b>	Environmental Protection Agency
<b>FAA</b>	Flame Atomic Absorption
<b>LBP</b>	Lead Based Paint
<b>LCP</b>	Lead Containing Paint
<b>mg/L</b>	Milligrams per Liter
<b>NESHAP</b>	National Emissions Standards for Hazardous Air Pollutants
<b>NVLAP</b>	National Voluntary Laboratory Accreditation Program
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PCBs</b>	Polychlorinated Biphenyls
<b>PD</b>	Project Designer
<b>PEL</b>	Permissible Exposure Limits
<b>PLM</b>	Polarized Light Microscopy
<b>PPE</b>	Personal Protective Equipment
<b>ppm</b>	Parts Per Million
<b>RACM</b>	Regulated Asbestos Containing Material
<b>RBM</b>	Regulated Building Materials
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>RHMs</b>	Recognized Hazardous Materials
<b>SSAP</b>	Structure Survey Assessment Plan
<b>TC</b>	Toxicity Characteristic
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>USEPA</b>	U.S. Environmental Protection Agency
<b>UWR</b>	EPA Universal Waste Rule

## LIST OF SAMPLING ACRONYMS/ABBREVIATIONS

<b>BM</b>	Brick/Mortar
<b>CB</b>	Cove Base
<b>CC</b>	Concrete
<b>CER</b>	Ceramic Block
<b>CM</b>	Ceramic Tile/Mortar
<b>CMU</b>	Concrete Masonry Unit/Mortar
<b>CP</b>	Carpet
<b>CT</b>	Ceiling Tile
<b>D</b>	Drywall (no surfacing)
<b>DJ</b>	Drywall/Joint Compound
<b>F</b>	Flooring
<b>FT</b>	Floor Tile
<b>IN</b>	Insulation
<b>L</b>	Linoleum
<b>M</b>	Mastic
<b>MF</b>	Multiple layered Flooring
<b>MT</b>	Mortar
<b>PC</b>	Popcorn Ceiling
<b>PL</b>	Plaster
<b>PM</b>	Panel/Mastic
<b>R</b>	Roofing
<b>RF</b>	Roof Flashing
<b>S</b>	Siding
<b>ST</b>	Stucco
<b>T</b>	Texture (no substrate)
<b>TC</b>	Textured Composite Board
<b>TD</b>	Textured Drywall
<b>TSI</b>	Thermal System Insulation
<b>VB</b>	Vapor Barrier
<b>VP</b>	Vent Paste (heating/cooling systems)
<b>VW</b>	Vent Wrap (heating/cooling systems)
<b>WC</b>	Window Caulk
<b>WD</b>	Wallpapered Drywall

## **Tables**

Table 1	Project Details
Table 2	Asbestos Containing Samples
Table 3	Non-Asbestos Containing Samples
Table 4	Summary of Paint Chip Laboratory Analysis for Lead
Table 5	Summary of Regulated Building Materials

## **Figures**

Figure 1	Site Location
Figure 2	Asbestos Bulk Sample Locations
Figure 3	Lead-Based Paint Sample Locations
Figure 4	Regulated Building Materials

## **Appendices**

Appendix A	Asbestos and Lead Inspector (s) Certifications
Appendix B	Positive Asbestos Sample Material Photographs
Appendix C	Laboratory Results & Chain of Custody – Asbestos
Appendix D	Laboratory Results & Chain of Custody – Lead & TCLP

**APEC Project # 18-3066 - 007**

**Prepared for**

Kiewit Meridiam Partners

**Prepared by**



Logan Greenfield, CABI & AMS #20715  
VP of Field Services

**Reviewed by**



Brandice Eslinger, EP, CABI & PD # 5494  
President

# 1 Introduction

All-Phase Environmental Consultants, Inc. (APEC) was contracted to complete an environmental building survey for suspect asbestos-containing materials (ACMs), lead-based paint (LBP), and regulated building materials (RBM) at 4600 Clayton Street, Denver, CO 80216. This survey will identify the materials that will need to be abated or removed prior to the future demolition activities.

**Table 1 Project Details**

Client Name:	Kiewit Meridiam Partners
Site Location:	4600 Clayton Street, Denver, CO 80216
Building Type	One Building – Single family residence with Basement and Garage
Building Size	Building is approximately 725 square feet + Basement
Construction Date:	1942 – Based on the City and County of Denver Assessor’s Records
Building Uses:	Single Family Residence
Types of Materials to be Disturbed/Description of Proposed Disturbances:	Client intends to demolish the structure. All building materials will be impacted.

This Structure Survey Assessment was conducted as part of the Central 70 Project located in Denver, Colorado. This assessment was conducted in accordance with the Structure Survey Assessment Plan (SSAP), dated March 27, 2018. The SSAP, as defined in Section 23.13.2 of Schedule 17 (Environmental Requirements) of the final Central 70 Project Agreement between the Colorado Department of Transportation (CDOT) and Kiewit Meridiam Partners, identifies the procedures for completing building and structure surveys for ACMs, LBP and universal wastes or other Recognized Hazardous Materials (RHMs), as defined by the Resource Conservation and Recovery Act (RCRA); universal waste, as defined by the U.S. Environmental Protection Agency (EPA) and 6 Code of Federal Regulations (CCR) Part 273 of the Colorado Hazardous Waste Regulations; chlorofluorocarbons (CFCs), as defined by the Clean Air Act; and polychlorinated biphenyls (PCBs), as defined by the Toxic Substances Control Act.

## 2 Site Survey Methodology

---

### 2.1 ASBESTOS SURVEY

On April 18, 2018 and August 2, 2018 APEC certified personnel Logan Greenfield conducted an asbestos survey for demolition at 4600 Clayton Street, Denver, CO 80216. The asbestos survey (inspection/sampling) was completed in accordance with the SSAP and follows guidelines established under the EPA's Asbestos Hazard and Response Act (AHERA) program and as required by USEPA regulation 40 Code of Federal Regulations (CFR) Part 61, National Emissions Standards for Hazardous Air Pollutants (NESHAP). Bulk sampling of suspected ACMs was performed in strict accordance with AHERA sampling procedures detailed in 40 CFR 763.86. These include but aren't limited to labeling each sample, recording each sample on a chain of custody, taking a photo of the sample and recording the location on a site diagram. Demolition work could disturb materials that contain asbestos and put unprotected workers at risk, violating asbestos regulations, which are enforced by the Occupational Safety and Health Administration (OSHA), the EPA, the Colorado Department of Public Health and Environment (CDPHE) and the Denver County Health Department. All samples were collected and submitted to EMSL Analytical, Inc. in Denver, CO per APEC chain of custody protocol. The laboratory is a member of the National Voluntary Laboratory Accreditation Program (NVLAP) and is qualified to perform the required analysis (Appendix A). The analysis conducted was the EPA Interim Method for the Determination of Asbestos in Bulk Samples, using standard Polarized Light Microscopy (PLM) and dispersion staining as established in 40 CFR Part 763.

***This inspection report and methodology complies with the CDPHE Asbestos Sampling and Report Requirements Memorandum dated February 28, 2018.***

---

### 2.2 LEAD-BASED PAINT SURVEY

On April 18, 2018, APEC certified personnel Rick Ralston conducted the LBP survey. The lead survey was conducted to evaluate the absence and/or presence of LBP or lead-containing paint (LCP) that will be impacted during future demolition activities. The survey consisted of reviewing and inspecting the interior, exterior and roof system of the structure for suspect LBP or LCP. The testing method was the use of a heat gun and/or scraping a portion of the paint to the substrate (material under the paint). Proper chain of custody procedures were followed and samples were sent to EMSL Analytical, Inc. in Cinnaminson, NJ, via Fed Ex. The samples were analyzed by total lead (percent by weight) via Flame Atomic Absorption (FAA) by EPA Method 7420. EMSL is accredited under the American Industrial Hygiene Association's Environmental Lead Proficiency Analytical Testing program. LBP, according to the EPA, is defined as paint that contains lead in concentrations greater than 1.0 milligrams per square centimeter (mg/cm<sup>2</sup>) as measured with an X-ray fluorescence (XRF) or 5,000 parts per million (ppm) when measured by weight, or 0.5 percent (%) by weight.

A total of 11 homogeneous paint color variations of suspect LBP areas were identified. One paint chip sample was collected from each suspect homogeneous area and submitted to the laboratory for analysis. Representative photographs of each known LBP/LCP were taken and are included in a photographic log (Appendix B), and the paint chip sample locations were recorded and are included in sample location drawing (Figures 3). Descriptions of the suspect homogeneous materials and a list of the collected samples can be viewed in the 'Findings' section.

Based on the analytical results for the 11 samples taken, a Toxicity Characteristic Leachate Procedure (TCLP) sample was analyzed by collecting a representative sample (approximately 105 grams) of combined suspect building materials. Most landfills require analytical results before building materials can be disposed. The sample results are located in Appendix D.

---

### **2.3 SURVEY OF SUSPECTED RBMS**

On April 18, 2018, APEC personnel conducted the RBM inventory consisting of inspecting the interior, exterior and roof system. The inspection was conducted to visually identify and quantify any building materials, devices and equipment suspected of containing potentially regulated materials as they pertain to the EPA Universal Waste Rule (UWR) requirements (40 CFR, Part 273). APECs inventory review consisted of the following : potential mercury-containing thermostats/switches; fluorescent light tubes and compact fluorescent bulbs; items potentially containing polychlorinated biphenyls (PCBs) (generally ballasts found within the fluorescent light fixtures); tritium powered exit signs; smoke detectors potentially containing Americium-241; and Freon-containing refrigeration systems. The survey of suspected RBMs are for use by contractors conducting the removal of items from the property. Samples of suspect RBMs are not required for this type of survey, as all determinations are made by visual means.

Although not a “regulated material”, items such as gas meters, electrical meters and electrical panels are listed with the RBM inventory. These materials will require removal and/or disconnection prior to demolition and until done so should be handled with care.

## 3 Findings

---

### 3.1 ASBESTOS SURVEY

A total of 31 bulk samples, including 1 duplicate sample, were collected from 9 suspect homogenous materials throughout the structure, and the results of the PLM analysis are presented in Table 2 and table 3. The following samples were positive for ACMs (i.e. present greater than 1%):

#### Regulated Asbestos Containing Materials (RACM)

- 4600CL-R3-4A and 4600CL-R3-4B – Flooring/Floor tile - bottom layer in rooms 3, 4, and 5
- 4600CL-R10-7A, 4600CL-R10-7B, and 4600C-R6-7C – Duct wrap on furnace supply registers in rooms 3, 6, and 10

#### Point Counts

Point count analysis occurs for samples with <1% of asbestos. The point count results are also presented in Table 2. The laboratory analytical report is included as Appendix C. The following samples were confirmed to be OSHA regulated, due to analyzing at/or below 1% of asbestos in point count analysis:

- 4600CL-R3-1A, 4600CL-R4-1B, 4600CL-R2-1C, 4600CL-R7-1D, 4600CL-R6-1E, 4600CL-R8-1F, and 4600CL-R5-1G – Smooth textured plaster – OSHA regulated
- 4600CL-R1-2A, 4600CL-R1-2B, and 4600CL-R1-2C – Rough textured plaster – OSHA regulated

#### Duplicate Samples

For quality assurance purposes, duplicate samples are taken approximately every 20<sup>th</sup> sample. Duplicate samples are listed as a duplicate (Q) in the sample location column of Table 2 or Table 3. One sample, 4600CL-R14-5Q, was collected because a total of 30 samples were obtained.

---

### 3.2 LEAD-BASED PAINT SURVEY

A total of 11 homogeneous paint color variations were analyzed for the presence of LBPs and LCPs (Table 4; Figure 3). Under EPA 40 CFR Part 745, LBP is defined as any paint or surface coating that contains lead equal to or exceeding 0.5% (by weight), while LCP is defined as any paint or surface coating containing lead greater than or equal to 0.06% up to 0.5% (by weight). Caution should be taken during demolition to minimize cutting, abrading, or otherwise causing an air disturbance to this material and work must be completed in accordance with the OSHA Lead in Construction Standard (29 CFR 1926.62).

One lead sample (4600-Garage-11) result was found to be greater than 0.06% by weight and less than 0.5% by weight and is considered LCP (Table 4). The remaining 10 sample results were less than the LCP and LBP thresholds, and are considered non-lead containing paint (NLC). The laboratory analytical report is included in Appendix D.

---

### **3.2.1 TCLP LEAD ANALYTICAL RESULTS**

One sample was analyzed to be LCP, thus TCLP analysis of lead was performed. TCLP analysis simulates the potential for the demolished building materials to leach lead if placed in the landfill and results of the analysis determine if the materials will be considered hazardous waste. TCLP analysis was performed for landfill compliance. The Toxicity Characteristic (TC) maximum concentration is 5 milligrams per liter (mg/L). The results of the TCLP analysis is <0.40 mg/L, which is below the regulated limit and therefore not considered hazardous. The analytical report is included in Appendix D.

---

### **3.3 REGULATED BUILDING MATERIALS INVENTORY SURVEY**

Several suspect RBMs were visually identified throughout the structure. RBMs that are a cause of concern, when discovered, are discussed below. The following non-regulated hazardous building materials were identified at the property: gas main, gas meter, refrigerator, electrical breaker box, electric meter, and furnace. Although these items are non-regulated, they will need to be removed prior to demolition. A complete list of the RBMs is presented in Table 3-3, and selected locations of the RBMs are depicted in Figure 4.

## 4 Conclusions and Recommendations

---

### 4.1 ASBESTOS

Approximately 10 square feet of RACM was identified as duct wrap around the furnace supply registers in rooms 3, 6, and 10. These materials will require abatement due to being rendered friable easily prior to demolition of the structures.

Approximately 338 square feet of vinyl floor tile in rooms 3, 4, and 5 was also confirmed to be an ACM. This material is a Category I Non-friable ACM, but can be made friable during the demolition process. Therefore, the material will need to be abated prior to demolition.

No other ACM was identified throughout the structures; however, if additional suspect materials, not sampled during this investigation, are identified during demolition, they should either be assumed to be ACM or should be sampled prior to disturbance.

Prior to demolition activities, all friable and non-friable (that can or will be rendered friable) ACM that may be impacted during the demolition must be abated by a Colorado Certified Asbestos Abatement Contractor as required by NESHAP and the CDPHE – Air Pollution Control Division: Asbestos.

According to AHERA, EPA, and the CDPHE, materials testing at less than or equal to 1% asbestos fibers are not considered to be an asbestos containing material (ACM). However, any materials containing asbestos still need to be regulated. OSHA protocol must be followed when handling materials containing ANY amount of asbestos. Proper personal protective equipment (PPE) and engineering controls must be utilized if these materials will be impacted during demolition activities.

---

### 4.2 LEAD-BASED PAINT

Lead was detected at concentrations above the LCP threshold in 1 of the 11 samples. The remaining 10 samples are considered NLC. Although LCP was identified in the samples analyzed, the TC limit of 5 mg/L was not exceeded in the TCLP lead analysis. No lead abatement is required prior to demolition. TCLP results confirmed that the waste stream is not hazardous with respect to lead content.

While the TCLP results indicate that the waste stream is not characteristically hazardous with respect to lead content, LCP is still present in the building materials. Therefore, the contractor responsible for demolition of this structure is notified with receipt of this report of the presence or potential presence of LCP and/or LBP in the building materials that comprise the building. The contractor should also notify their employees of the presence of LCP prior to any disturbance, and make the US Department of Labor Occupational Safety and Health Administration publication number 3142-12R 2004 available to their workers. (“Lead in Construction”, <http://www.osha.gov/Publications/osh3142.pdf>). The standards address topics such as permissible exposure limits (PELs) for workers, exposure assessment, protection of employees during assessment of exposure, employee notification, PPE, medical surveillance, along with other topics related to working with LCP and LBP.

---

### 4.3 REGULATED BUILDING MATERIALS

Materials found during the regulated materials inventory within the building may require special handling or disposal prior to demolition activities. If abatement is needed, APEC recommends that the asbestos contractor or general contractor selected by the client properly dispose of these regulated materials, per applicable regulations.

With regards to RBMs, if listed, it is likely that the ballasts in the fluorescent light fixtures do contain PCBs. Where a manufacturer's label is present indicating "no PCBs", the ballast can be disposed of with recyclable metal or with other municipal waste. During removal for disposal as part of the demolition activities, each ballast should be visually inspected for the manufacturer's label indicating "no PCBs". If the label does not have this notation, the ballast should be considered PCB-containing and should be disposed of as a hazardous waste in accordance with local, state, and federal regulatory guidelines. Refrigerators and air conditioning units contain freon; this will need to be reclaimed or taken to a facility capable of this activity. Mercury containing thermostats will need to be disposed of at a facility certified to take this type of material. The contractor should also carefully remove all associated fluorescent light tubes and compact fluorescent lights and recycle or dispose of these materials according to applicable regulations.

This inspection was primarily relevant to the Federal UWR requirements under 40 CFR 273. It should be noted that contractors submitting bids for removal of the RBMs should verify quantities, conditions, and locations of all RBMs prior to bid submittals and initiating demolition activities. The contractor is also responsible for proper recycling and/or disposal of the RBMs, and should follow all federal, state and local regulations when handling these materials.

## 5 Limitations

This Structure Survey Assessment Report was prepared by All-Phase Environmental Consultants, Inc., at the request of and for the sole benefit of Kiewit Meridiam Partners, or any entity controlling, controlled by, or under common control with Colorado Department of Transportation. APECs certified inspectors used reasonable diligence and professional judgement to identify all suspect asbestos-containing materials, lead based paint, and regulated building materials in the property. APEC will not be held liable for property damage or any loss of property value due to the inspection. This report is not an abatement plan and is intended to be informational only; APEC will not be held responsible for the mishandling of the information contained herein.

APEC utilized destructive inspection methods in performing this survey, however accessibility may have been a limiting condition. If additional impacted suspect materials are discovered during related work for which there are no sample documentation/results, APEC recommends pursuing one of the following alternatives: Sample and analyze the discovered suspect material(s) to determine whether it contains asbestos, lead or other regulated materials; or assume the material(s) to be containing, quantify and remove on a unit cost basis.

Notwithstanding any provision to the contrary, the total liability of "All Phase Environmental Consultants, Inc.", and its employees, officers or directors be liable in contract, tort, strict liability warranty or otherwise, for any special, incidental or consequential damages, such as but not limited to, delay, disruption, loss of product, loss of anticipated profits or revenue, damages, cost, and expenses, including attorney's fees, shall not exceed the aggregate amount paid to All Phase Environmental Consultants, Inc. under this Agreement regardless of the legal theory under which such liability is imposed.

## Tables

Table 2	Asbestos Containing Samples
Table 3	Non-Asbestos Containing Samples
Table 4	Summary of Paint Chip Laboratory Analysis for Lead
Table 5	Summary of Regulated Building Materials

**Table 2 Positive Asbestos Containing Samples and OSHA Regulated Samples**

Sample Name	Sample Location	Lab Results/ Asbestos Type	Detection Method(s)	Condition	Material Description	Material Location	NESHAP Classification	Estimated Quantity (Sq. ft.)
4600CL-R2-1C	ROOM 2	PLASTER 0.25%Chrysotile	Point Count	Good	Smooth Plaster	Ceiling of room1 and Walls/Ceilings of rooms 2,3,4,5,6,7&8	OSHA Regulated Material	2,134
4600CL-R8-1F	ROOM 8	PLASTER 0.50% Chrysotile	Point Count	Good				
4600CL-R5-1G	ROOM 5	PLASTER <0.25% Chrysotile	Point Count	Good				
4600CL-R3-1A 4600CL-R4-1B 4600CL-R7-1D 4600CL-R6-1E	Homogeneous to Samples - 4600CL-R2-1C, 4600CL-R8-1F and 4600CL-R5-1G							
4600CL-R1-2A	ROOM 1	PLASTER <0.25% Chrysotile	Point Count	Good	Rough Plaster	Walls of room 1	OSHA Regulated Material	520
4600CL-R1-2C		PLASTER <0.25% Chrysotile	Point Count	Good				
4600CL-R1-2B	Homogeneous to Samples - 4600CL-R1-2A and 4600CL-R1-2C							
4600CL-R3-4B	ROOM 3	Floor Tile	PLM	Good	Flooring/Floor Tile	Bottom Layer Flooring in rooms 3,4 & 5	Cat I	338
4600CL-R3-4A	Homogeneous to Sample - 4600CL-R3-4B							
4600CL-R10-7A	ROOM 10	DUCT WRAP 55% Chrysotile	PLM	Good	DUCT WRAP	Supply duct registers in rooms 3 & 6-can be seen in room 10 (basement)	RACM	10
4600CL-R10-7B		DUCT WRAP 60% Chrysotile	PLM	Good				
ND=Non-Detect PLM=Polarized Light Microscopy NA=Not Applicable RACM=Regulated Asbestos Containing Materials								

Sample Name	Sample Location	Lab Results/ Asbestos Type	Detection Method(s)	Condition	Material Description	Material Location	NESHAP Classification	Estimated Quantity (Sq. ft.)
4600CL-R6-7C	ROOM 6	DUCT WRAP 80% CHRYSOTILE	PLM	Good	DUCT WRAP	REGISTERS IN ROOMS 3 & 6	RACM	10

ND=Non-Detect  
 PLM=Polarized Light Microscopy  
 NA=Not Applicable  
 RACM=Regulated Asbestos Containing Materials

**Table 3 Non-Asbestos Containing Samples**

Sample Name	Sample Location	Lab Results/ Asbestos Type	Detection Method(s)	Condition	Material Description	Material Location	NESHAP Classification		
4600CL-R3-3A	ROOM 3	ND	PLM	Good	CERAMIC TILE MASTIC	FLOORING IN ROOMS 3,4 & 5	NA		
4600CL-R3-3B		ND	PLM	Good			NA		
4600CL-R10-5A	ROOM 10	ND	PLM	Good	ROUGH DRYWALL TEXTURE	WALLS OF ROOMS 9,10,11,12,13&14	NA		
4600CL-R10-5B		ND	PLM	Good			NA		
4600CL-R14-5C	ROOM 14	ND	PLM	Good			NA		
4600CL-R13-5D	ROOM 13	ND	PLM	Good			NA		
4600CL-R13-5E		ND	PLM	Good			NA		
4600CL-R14-5F	ROOM 14	ND	PLM	Good			NA		
4600CL-R13-5G	ROOM 13	ND	PLM	Good			NA		
4600CL-R14-5Q	ROOM 14	ND	PLM	Good			NA		
4600CL-R13-6A	ROOM 13	ND	PLM	Good			Wood Pattern Flooring/Mastic	WALLS OF ROOMS 12,13&14	NA
4600CL-R14-6B	ROOM 14	ND	PLM	Good				NA	
4600CL-EX-8A	EXTERIOR	ND	PLM	Good	ROOFING	HOUSE ROOF	NA		
4600CL-EX-8B		ND	PLM	Good			NA		
4600CL-EX-9A		ND	PLM	Good	ROOFING	GARAGE ROOF	NA		
4600CL-EX-9B		ND	PLM	Good			NA		
ND=Non-Detect PLM=Polarized Light Microscopy NA=Not Applicable									

**Table 4 Summary of Paint Chip Laboratory Analysis for Lead**

<b>Sample Number</b>	<b>Sample Location</b>	<b>Lead Concentration (% wt.)</b>	<b>Component</b>	<b>Paint Description</b>	<b>Classification</b>
4600-R1-1	Room 1	<0.0080	Drywall	Red	NLC
4600-R1-2	Room 1	<0.0080	Drywall	White	NLC
4600-R6-3	Room 6	<0.0080	Drywall	Pink	NLC
4600-R7-4	Room 7	0.047	Drywall	White	NLC
4600-Stairs-5	Stairs	0.023	Wood	Blue	NLC
4600-R10-6	Room 10	<0.0080	Drywall	White	NLC
4600-R13-7	Room 13	<0.0080	Drywall	Purple	NLC
4600-R13Q-8	Room 13	<0.0080	Drywall	Purple	NLC
4600-Out-9	OUTSIDE	<0.0080	Masonite	Brown	NLC
4600-Out-10	OUTSIDE	<0.0080	Wood	White	NLC
<b>4600-Garage-11</b>	<b>GARAGE</b>	<b>0.21</b>	<b>Wood</b>	<b>Tan</b>	<b>LCP</b>

**Table 5 Summary of Regulated Building Materials**

<b>Room</b>	<b>Material</b>	<b>Location</b>	<b>Quantity Fixture/Bulbs each</b>
Room 12	Fluorescent Light Fixture	Ceiling	1 fix/2 bulbs
Room 3	Damaged Breaker box	East-Wall	1
Exterior	Breaker box	East-Wall	1
Exterior	Electric Meter	East-Wall	1
Exterior	Gas Meter	Exterior-South West Cor	1
Room 11	Furnace	Basement	1
Room 11	Gas Line	Ceiling	1
Room 3	Refrigerator	wall	1
Exterior	Security Light	West Side	1
Room 4	Thermostat-non merc	North Wall	1

## Figures

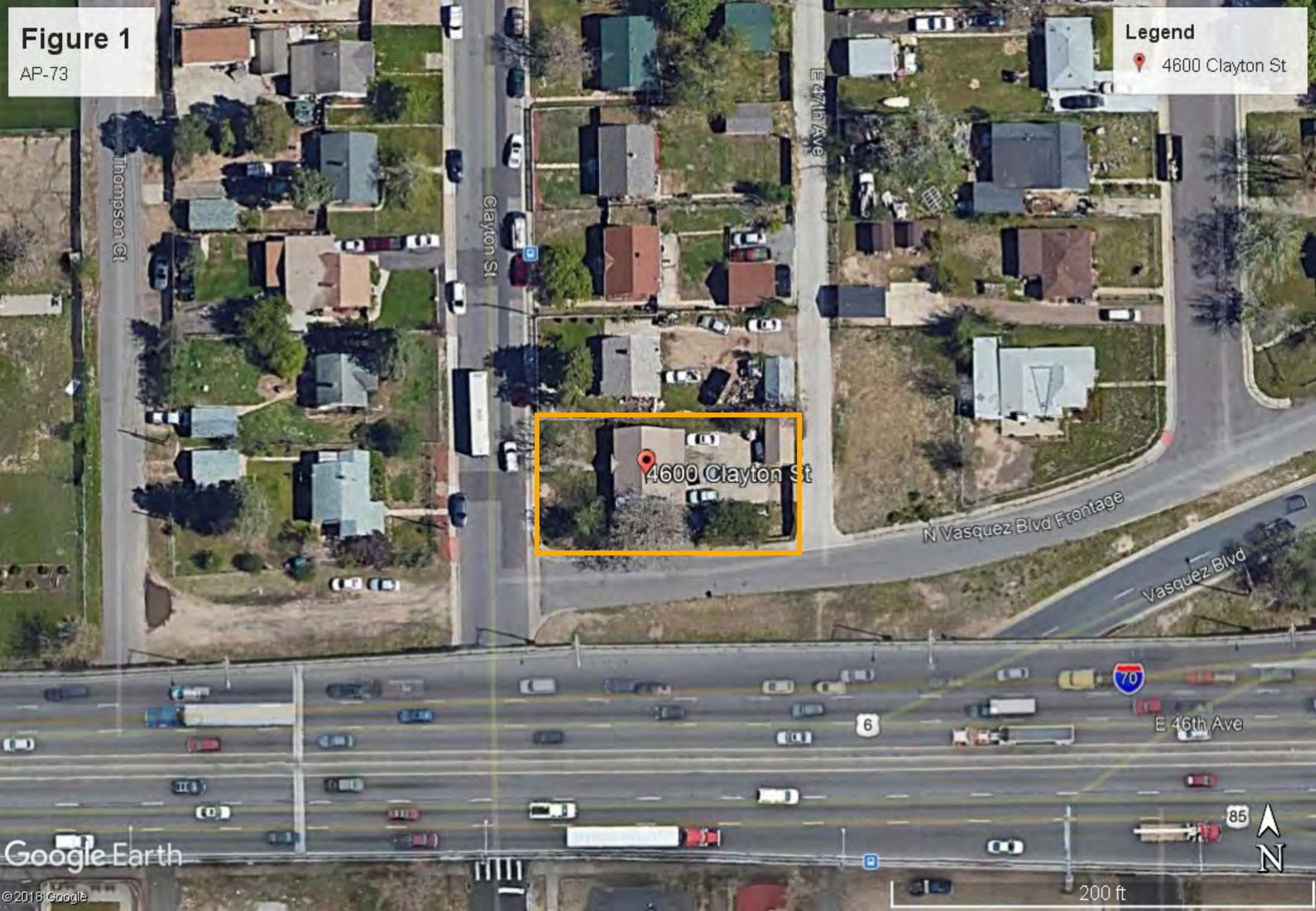
- Figure 1 Site Location
- Figure 2 Asbestos Bulk Sample Locations
- Figure 3 Lead-Based Paint Sample Locations
- Figure 4 Regulated Building Materials

Figure 1

AP-73

Legend

 4600 Clayton St



Thompson Ct

Clayton St

E 47th Ave

4600 Clayton St

N Vasquez Blvd Frontage

Vasquez Blvd



E 46th Ave

6

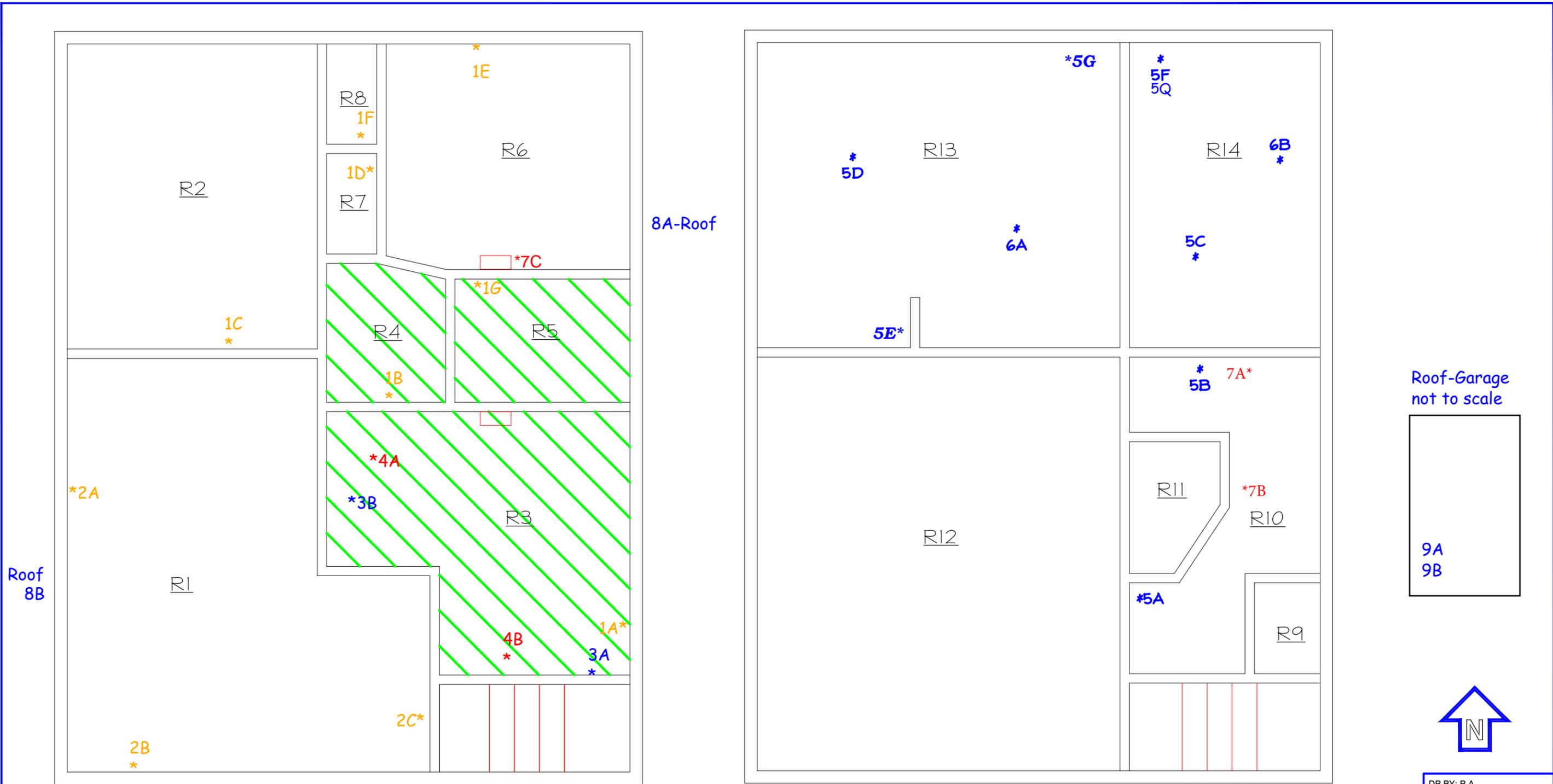
85

Google Earth

© 2018 Google

200 ft

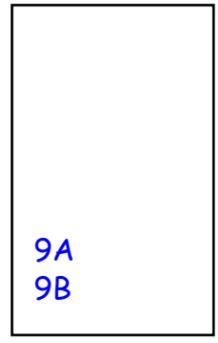




Roof 8B

8A-Roof

Roof-Garage  
not to scale



DR BY: R.A.  
APPROVED: B.N.E.  
SCALE: 1/4" = 1'-0"

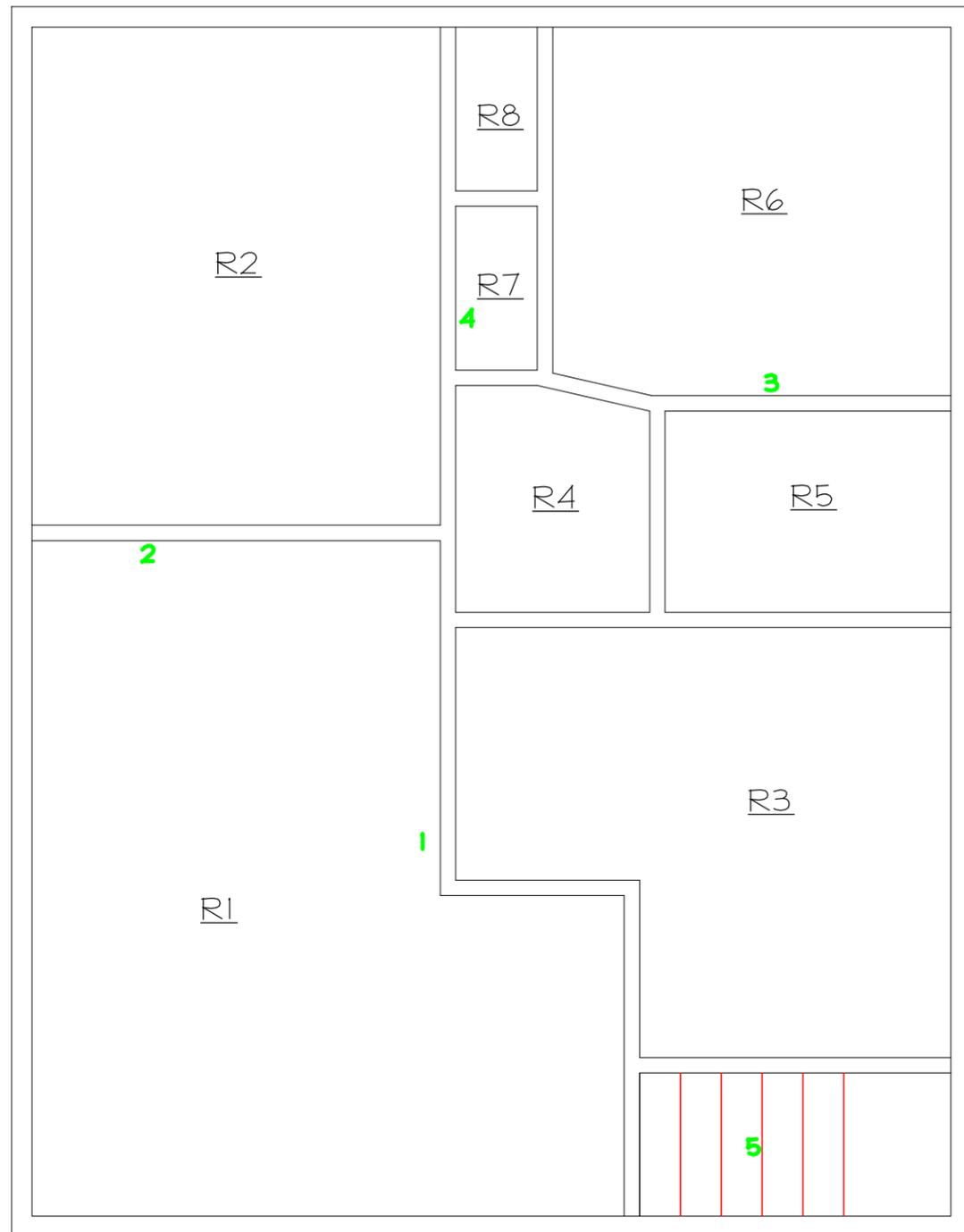
MAIN FLOOR  
PLAN

- = Positive Asbestos at Floor
- = Vent Boot Wrap Positive for Asbestos (10A & 10B)
- R1 = Room Numbers
- 4B = Asbestos Samples (Detect)
- 4B = Asbestos Samples (Non-Detect)
- 4B = OSHA Regulated Samples (1% or less)

BASEMENT  
PLAN

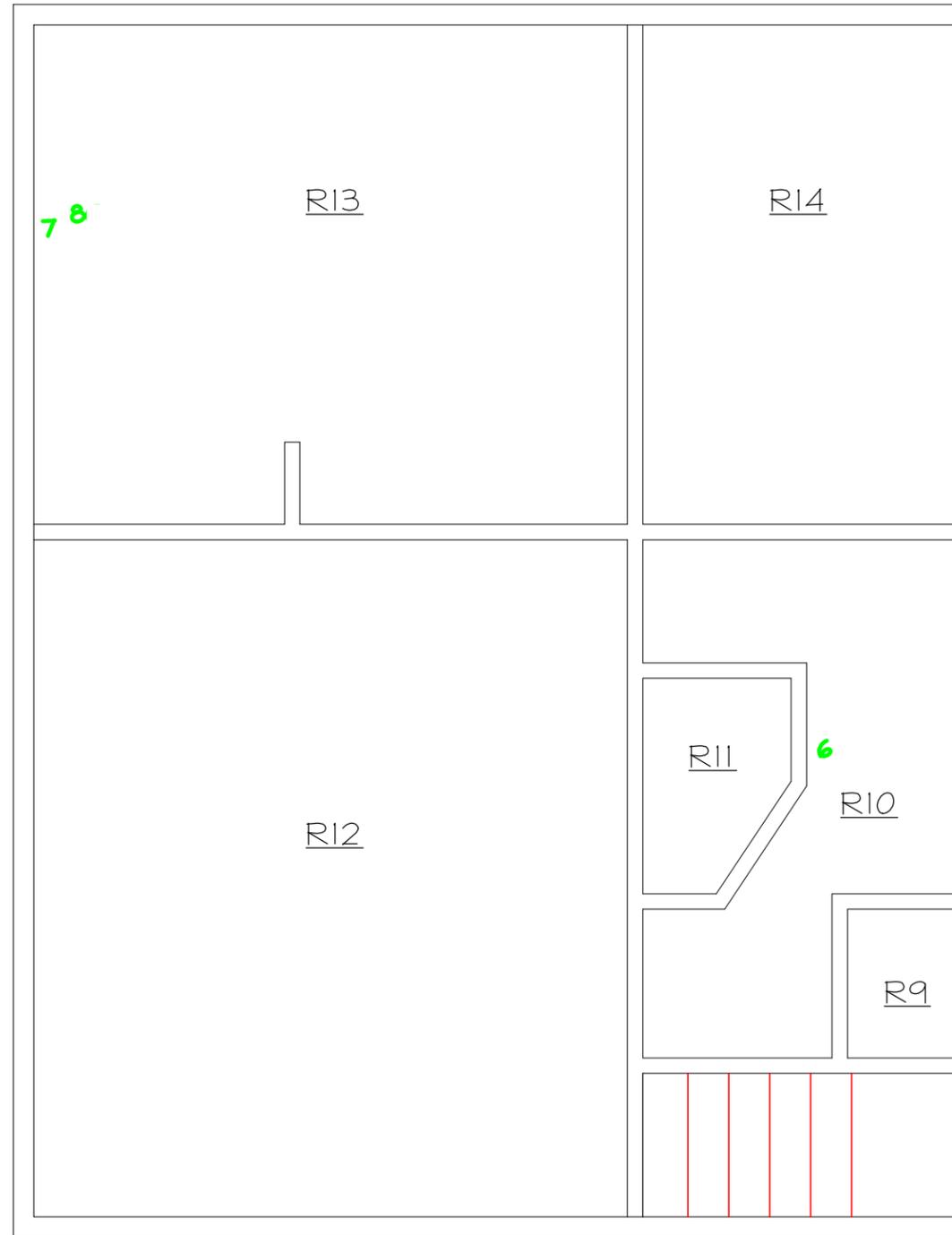
**FIGURE 2 - Asbestos Bulk Sample Locations**  
**CENTRAL 70 - Structure Survey Assessment Map**  
**AP-73**  
 4600 Clayton Street, Denver, CO  
 April 18, 2018  
 APEC #: 18-3066

**ALL-PHASE**  
 ENVIRONMENTAL CONSULTANTS, INC.  
 721 W 9TH STREET  
 Pueblo, CO 81003 Ph: (719) 545-0375

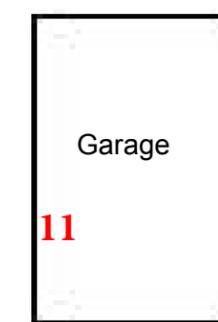


MAIN FLOOR  
PLAN

- R1 = Room Numbers
- 4 = Lead Base Paint (Detect)
- 4 = Lead Containing Paint (Detect)
- 4 = Lead Base Paint (Non-Detect)



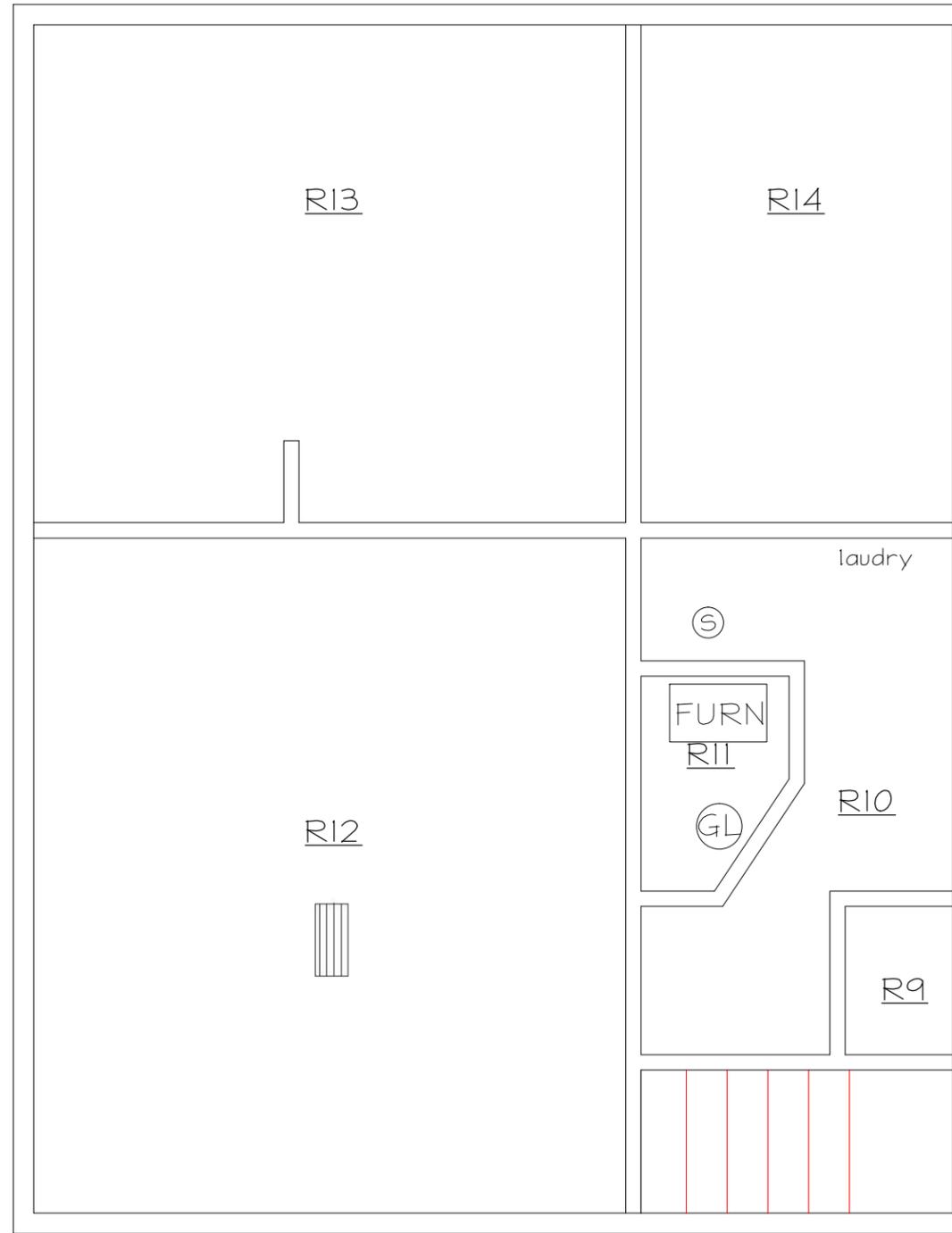
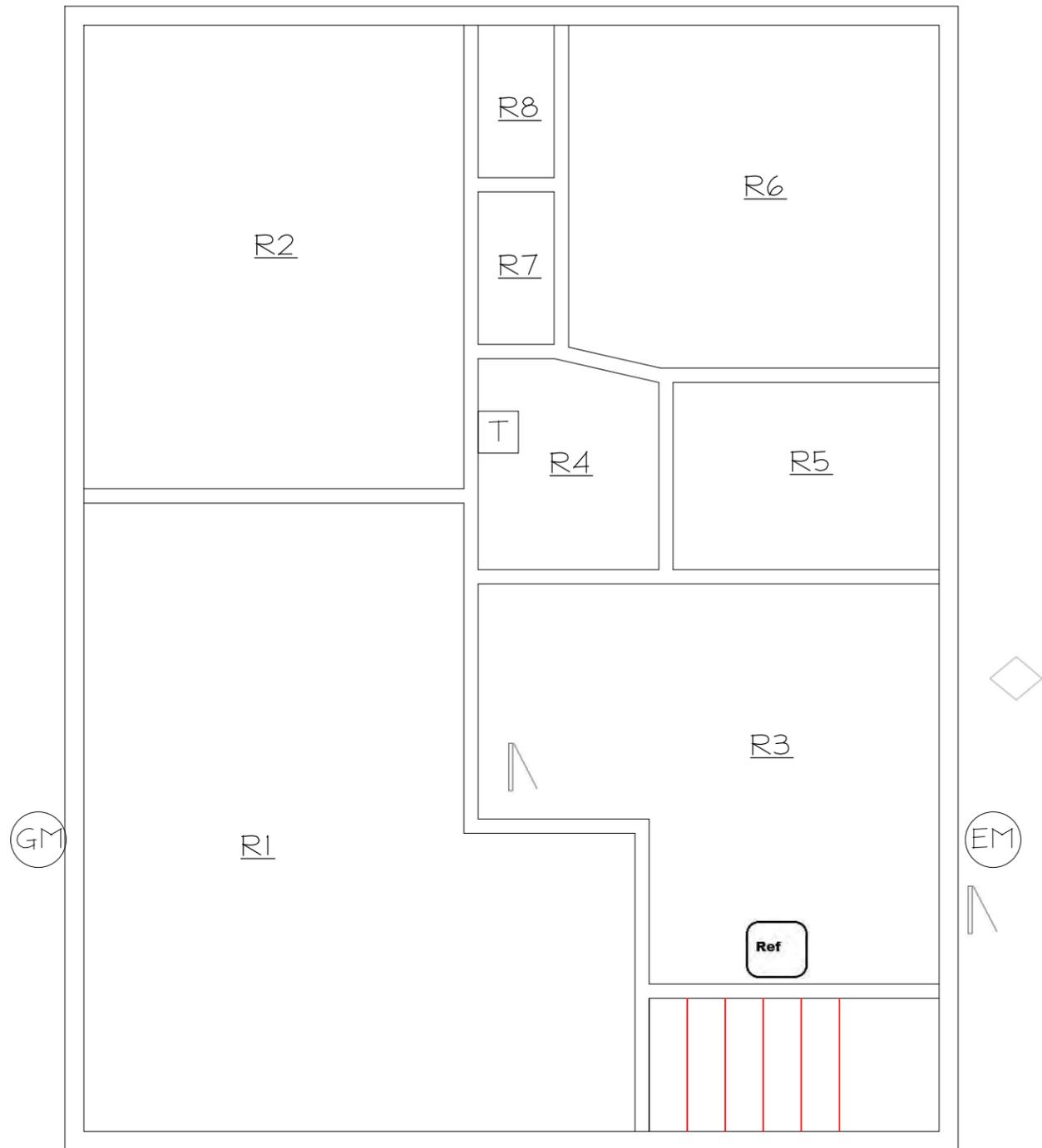
BASEMENT  
PLAN



DR BY: R.A.  
APPROVED: B.N.E.  
SCALE: 1/4" = 1'-0"

**FIGURE 3 - Lead-Based Paint Sample Locations**  
CENTRAL 70 - Structure Survey Assessment Map  
**AP-73**  
4600 Clayton Street, Denver, CO  
April 18, 2018  
APEC #: 18-3066

**ALL-PHASE**  
ENVIRONMENTAL CONSULTANTS, INC.  
721 W 9TH STREET  
Pueblo, CO 81003 Ph: (719) 545-0375



DR BY: R.A.  
 APPROVED: B.N.E.  
 SCALE: 1/4" = 1'-0"

MAIN FLOOR PLAN

BASEMENT PLAN

- RI = Room Numbers
- EM = Electrical Meter
- GL = Gas Line
- ∠ = Breaker Panel
- Ref = Refrigerator
- ⏏ = Fluorescent Lights
- GM = Gas Meter
- T = Thermostat
- ◇ = Security light

**FIGURE 4 - Regulated Building Materials**  
 CENTRAL 70 - Structure Survey Assessment Map  
 AP-73  
 4600 Clayton Street, Denver, CO  
 April 18, 2018  
 APEC #: 18-3066

**ALL-PHASE**  
 ENVIRONMENTAL CONSULTANTS, INC.  
 721 W 9TH STREET  
 Pueblo, CO 81003 Ph: (719) 545-0375

**A**

**ASBESTOS AND LEAD  
CERTIFICATIONS**





Colorado Department  
of Public Health  
and Environment

## ASBESTOS CERTIFICATION\*

This certifies that

**Logan Greenfield**

**Certification No.: 20715**

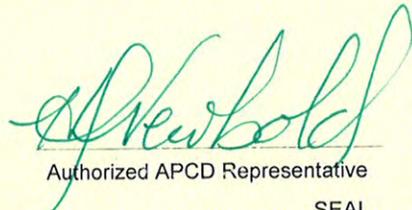
has met the requirements of 25-7-507, C.R.S. and Air Quality Control  
Commission Regulation No. 8, Part B, and is hereby certified by the  
state of Colorado in the following discipline:

**Building Inspector\***

**Issued: October 18, 2017**

**Expires: October 18, 2018**

*\* This certificate is valid only with the possession of a  
current Division-approved training course certification  
in the discipline specified above.*

  
Authorized APCD Representative  
SEAL



Colorado Department  
of Public Health  
and Environment

## ASBESTOS CERTIFICATION\*

This certifies that

**Logan Greenfield**

**Certification No.: 20715**

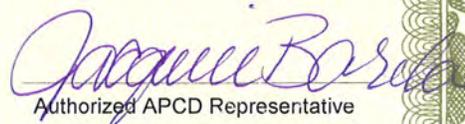
has met the requirements of 25-7-507, C.R.S. and Air Quality Control  
Commission Regulation No. 8, Part B, and is hereby certified by the  
state of Colorado in the following discipline:

**Building Inspector\***

**Issued:** September 13, 2018

**Expires:** October 18, 2019

*\* This certificate is valid only with the possession of a  
current Division-approved training course certification  
in the discipline specified above.*

  
Authorized APCD Representative

SEAL



1775 West 55<sup>th</sup> Avenue  
Denver, CO 80221  
303.410.4941  
trainingchc.com



*Certifies that*

Logan Greenfield

20715

*Has Successfully Completed the EPA- Approved Annual Asbestos Refresher Training Course  
Under Section 206 of the Toxic Substance Control Act (TSCA), Title II.*

**BUILDING INSPECTOR**

Course Date: September 20, 2017  
Certificate No.: R17-1661-AI-CO  
No. of Hours: 4  
Expiration Date: September 20, 2018  
Certification not valid without watermark

A handwritten signature in black ink that reads "Frank Hulce".

Frank Hulce - Instructor

A handwritten signature in black ink that reads "Danaya Benedetto".

Danaya Benedetto- Training Program Manager



CHC Training  
Nationwide Training & Certification Experts

www.chctraining.com  
303.412.6360  
855.60.CERTIFY

1775 West 55th Avenue  
Denver, CO 80221,  
United States of America

# CERTIFICATE OF ACHIEVEMENT

This certificate is awarded to:

## LOGAN GREENFIELD

In recognition of satisfactory completion of the EPA-approved annual asbestos  
refresher training course under section 206 of the Toxic Substance Control Act (TSCA),

Title II entitled:

### BUILDING INSPECTOR

COURSE DATE:

SEPTEMBER 12, 2018

EXPIRATION DATE

SEPTEMBER 12, 2019

COURSE HOURS:

4.0



Verify this Credential

*Danaya N. Benedetto*  
CEO & Training Program Manager

Credential License ID:  
11943552



*Daniel R. Beaver*  
Instructor

CHC Training Certificate No.  
R18-1729-AI-CO



Visit our Website



Colorado Department  
of Public Health  
and Environment

## LEAD-BASED PAINT CERTIFICATION\*

This certifies that

**Richard L. Ralston**

**Certification No.: 9130**

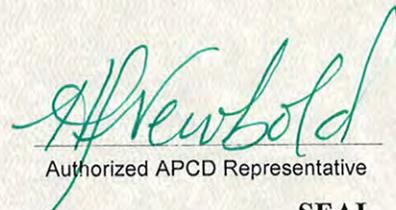
has met the requirements of 25-7-1104, C.R.S. and Air Quality Control  
Commission Regulation No. 19, and is hereby certified by the state of  
Colorado in the following discipline:

**Risk Assessor\***

**Issued: February 10, 2017**

**Expires: February 10, 2019**

*\* This certificate is valid only with the possession of a valid  
lead-based paint training certificate in the discipline specified  
above, issued by either a Colorado approved training provider,  
an EPA approved training provider, or a training provider  
approved by another EPA authorized program.*

  
Authorized APCD Representative

**SEAL**



1775 West 55<sup>th</sup> Avenue  
Denver, CO 80221  
303.410.4941  
trainingchc.com



*Certifies that*

Richard Ralston

*Has successfully completed the required training hours and passed the examination required by the Colorado Department of Public Health and Environment for:*

**Lead-Based Paint Risk Assessor Refresher**

*For the purposes of accreditation under the Colorado Department of Public Health and Environment Regulation No. 19 and other standard developed by EPA pursuant to Title IV of TSCA*

Course Date: April 6, 2016  
Certificate No.: R16-031-LRA-CO  
No. of Hours: 8  
Expiration Date: April 6, 2019

Certification not valid without watermark

*Luis E. Peon*

Luis Peon - Instructor

*Danaya Benedetto*

Danaya Benedetto - Training Program Manager

United States Department of Commerce  
National Institute of Standards and Technology



---

**Certificate of Accreditation to ISO/IEC 17025:2005**

---

NVLAP LAB CODE: 200828-0

**EMSL Analytical, Inc.**  
Denver, CO

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:*

**Asbestos Fiber Analysis**

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).*

---

2018-04-01 through 2019-03-31

*Effective Dates*



---

*Dana S. Haman*  
For the National Voluntary Laboratory Accreditation Program



**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005**

**EMSL Analytical, Inc.**

1010 Yuma Street  
Denver, CO 80204  
Ms. Amanda Lang  
Phone: 303-740-5700  
Email: [alang@emsl.com](mailto:alang@emsl.com)  
<http://www.emsl.com>

**ASBESTOS FIBER ANALYSIS**

**NVLAP LAB CODE 200828-0**

**Bulk Asbestos Analysis**

<u>Code</u>	<u>Description</u>
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

**Airborne Asbestos Analysis**

<u>Code</u>	<u>Description</u>
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

A handwritten signature in black ink, appearing to read "Dana S. Laman".

For the National Voluntary Laboratory Accreditation Program



## AIHA Laboratory Accreditation Programs, LLC

*acknowledges that*

### **EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Laboratory ID: 100194

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories* in the following:

#### **LABORATORY ACCREDITATION PROGRAMS**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> <b>INDUSTRIAL HYGIENE</b>         | Accreditation Expires: September 01, 2018 |
| <input checked="" type="checkbox"/> <b>ENVIRONMENTAL LEAD</b>         | Accreditation Expires: September 01, 2018 |
| <input checked="" type="checkbox"/> <b>ENVIRONMENTAL MICROBIOLOGY</b> | Accreditation Expires: September 01, 2018 |
| <input type="checkbox"/> <b>FOOD</b>                                  | Accreditation Expires:                    |
| <input type="checkbox"/> <b>UNIQUE SCOPES</b>                         | Accreditation Expires:                    |

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website ([www.aihaaccreditedlabs.org](http://www.aihaaccreditedlabs.org)) for the most current Scope.

William Walsh, CIH  
Chairperson, Analytical Accreditation Board

Cheryl O. Morton  
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision 15: 03/30/2016

Date Issued: 08/31/2016



## AIHA Laboratory Accreditation Programs, LLC SCOPE OF ACCREDITATION

### EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Laboratory ID: **100194**

Issue Date: 08/31/2016

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

The EPA recognizes the AIHA-LAP, LLC ELLAP program as meeting the requirements of the National Lead Laboratory Accreditation Program (NLLAP) established under Title X of the Residential Lead-Based Paint Hazard Reduction Act of 1992 and includes paint, soil and dust wipe analysis. Air analysis is not included as part of the NLLAP.

### Environmental Lead Laboratory Accreditation Program (ELLAP)

**Initial Accreditation Date: 01/18/1995**

Field of Testing (FoT)	Technology sub-type/ Detector	Method	Method Description <i>(for internal methods only)</i>
<b>Paint</b>		EPA SW-846 3050B	
		EPA SW-846 7000B	
<b>Soil</b>		EPA SW-846 3050B	
		EPA SW-846 7000B	
<b>Settled Dust by Wipe</b>		EPA SW-846 3050B	
		EPA SW-846 7000B	
<b>Airborne Dust</b>		NIOSH 7082	
<b>Composited Wipes</b>		EPA SW-846 3050B	
		EPA SW-846 7000B	

A complete listing of currently accredited Environmental Lead laboratories is available on the AIHA-LAP, LLC website at: <http://www.aihaaccreditedlabs.org>

**B**

POSITIVE ASBESTOS AND LEAD  
SAMPLE MATERIAL  
PHOTOGRAPHS





Floor Tile

Samples Represented –  
4600CL-R3-4A  
4600CL-R3-4B



Duct Wrap

Samples Represented –  
4600CL-R10-7A  
4600CL-R10-7B  
4600CL-R6-7C



Exterior Garage Paint - LCP

Sample Represented –  
4600-Garage-11

C

LABORATORY RESULTS &  
CHAIN OF CUSTODY -  
ASBESTOS





# EMSL Analytical, Inc.

1010 Yuma Street Denver, CO 80204  
Tel/Fax: (303) 740-5700 / (303) 741-1400  
<http://www.EMSL.com> / [denverlab@emsl.com](mailto:denverlab@emsl.com)

**EMSL Order:** 221802671  
**Customer ID:** ALLP62  
**Customer PO:**  
**Project ID:**

**Attention:** Logan Greenfield  
All-Phase Environmental Consultants, Inc  
721 West 9th Street  
Pueblo, CO 81003  
**Phone:** (719) 250-0036  
**Fax:** (719) 542-2807  
**Received Date:** 04/19/2018 10:00 AM  
**Analysis Date:** 04/24/2018  
**Collected Date:** 04/18/2018  
**Project:** Central 70/ 18-3066 (73)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4600CL-R3-1A-Text ure 221802671-0001	Smooth Plaster	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
4600CL-R3-1A-Skim Coat 221802671-0001A	Smooth Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4600CL-R3-1A-Plas ter 221802671-0001B	Smooth Plaster	Gray Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
4600CL-R4-1B-Text ure 221802671-0002	Smooth Plaster	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
4600CL-R4-1B-Skim Coat 221802671-0002A	Smooth Plaster	White Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
4600CL-R4-1B-Plas er 221802671-0002B	Smooth Plaster	Beige Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
4600CL-R2-1C-Text ure 221802671-0003	Smooth Plaster	White/Beige Non-Fibrous Heterogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
4600CL-R2-1C-Skim Coat 221802671-0003A	Smooth Plaster	White Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
4600CL-R2-1C-Plas er 221802671-0003B	Smooth Plaster	Gray Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	<1% Chrysotile

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from: 04/24/2018 18:40:32



# EMSL Analytical, Inc.

1010 Yuma Street Denver, CO 80204  
Tel/Fax: (303) 740-5700 / (303) 741-1400  
<http://www.EMSL.com> / [denverlab@emsl.com](mailto:denverlab@emsl.com)

**EMSL Order:** 221802671  
**Customer ID:** ALLP62  
**Customer PO:**  
**Project ID:**

**Attention:** Logan Greenfield  
All-Phase Environmental Consultants, Inc  
721 West 9th Street  
Pueblo, CO 81003

**Phone:** (719) 250-0036  
**Fax:** (719) 542-2807  
**Received Date:** 04/19/2018 10:00 AM  
**Analysis Date:** 04/24/2018  
**Collected Date:** 04/18/2018

**Project:** Central 70/ 18-3066 (73)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4600CL-R7-1D-Skim Coat 221802671-0004	Smooth Plaster	White Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
4600CL-R7-1D-Plaster 221802671-0004A	Smooth Plaster	Tan/Beige Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
4600CL-R6-1E-Texture 221802671-0005	Smooth Plaster	White/Pink Non-Fibrous Heterogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
4600CL-R6-1E-Skim Coat 221802671-0005A	Smooth Plaster	Gray/Beige Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
4600CL-R6-1E-Plaster 221802671-0005B	Smooth Plaster	Beige Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
4600CL-R8-1F-Skim Coat 221802671-0006	Smooth Plaster	White/Beige Non-Fibrous Heterogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
4600CL-R8-1F-Plaster 221802671-0006A	Smooth Plaster	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
4600CL-R5-1G-Texture 221802671-0007	Smooth Plaster	Tan/White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
4600CL-R5-1G-Skim Coat 221802671-0007A	Smooth Plaster	White Non-Fibrous Heterogeneous		10% Ca Carbonate 20% Gypsum 70% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from: 04/24/2018 18:40:32



# EMSL Analytical, Inc.

1010 Yuma Street Denver, CO 80204  
Tel/Fax: (303) 740-5700 / (303) 741-1400  
<http://www.EMSL.com> / [denverlab@emsl.com](mailto:denverlab@emsl.com)

**EMSL Order:** 221802671  
**Customer ID:** ALLP62  
**Customer PO:**  
**Project ID:**

**Attention:** Logan Greenfield  
All-Phase Environmental Consultants, Inc  
721 West 9th Street  
Pueblo, CO 81003  
**Phone:** (719) 250-0036  
**Fax:** (719) 542-2807  
**Received Date:** 04/19/2018 10:00 AM  
**Analysis Date:** 04/24/2018  
**Collected Date:** 04/18/2018  
**Project:** Central 70/ 18-3066 (73)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4600CL-R5-1G-Plaster 221802671-0007B	Smooth Plaster	Tan Fibrous Homogeneous		10% Gypsum 90% Non-fibrous (Other)	<1% Chrysotile
4600CL-R1-2A-Texture 221802671-0008	Rough Plaster	White/Red Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
4600CL-R1-2A-Skim Coat 221802671-0008A	Rough Plaster	White Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
4600CL-R1-2A-Plaster 221802671-0008B	Rough Plaster	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
4600CL-R1-2B-Skim Coat 221802671-0009	Rough Plaster	White/Beige Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
4600CL-R1-2B-Plaster 221802671-0009A	Rough Plaster	Beige Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
4600CL-R1-2C-Texture 221802671-0010	Rough Plaster	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
4600CL-R1-2C-Skim Coat 221802671-0010A	Rough Plaster	White Non-Fibrous Heterogeneous		10% Ca Carbonate 20% Gypsum 70% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
4600CL-R1-2C-Plaster 221802671-0010B	Rough Plaster	Tan Fibrous Homogeneous		10% Gypsum 90% Non-fibrous (Other)	<1% Chrysotile

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from: 04/24/2018 18:40:32



# EMSL Analytical, Inc.

1010 Yuma Street Denver, CO 80204  
Tel/Fax: (303) 740-5700 / (303) 741-1400  
<http://www.EMSL.com> / [denverlab@emsl.com](mailto:denverlab@emsl.com)

**EMSL Order:** 221802671  
**Customer ID:** ALLP62  
**Customer PO:**  
**Project ID:**

**Attention:** Logan Greenfield  
All-Phase Environmental Consultants, Inc  
721 West 9th Street  
Pueblo, CO 81003  
**Phone:** (719) 250-0036  
**Fax:** (719) 542-2807  
**Received Date:** 04/19/2018 10:00 AM  
**Analysis Date:** 04/24/2018  
**Collected Date:** 04/18/2018  
**Project:** Central 70/ 18-3066 (73)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4600CL-R3-3A 221802671-0011	Ceramic Tile Mastic	Gray Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
4600CL-R3-3B-Thin set 221802671-0012	Ceramic Tile Mastic	Gray Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
4600CL-R3-3B-White Material 221802671-0012A	Ceramic Tile Mastic	White Fibrous Homogeneous	60% Cellulose 15% Glass	25% Non-fibrous (Other)	None Detected
Fibrous material resembling sheet vinyl backing / underlayment attached to gray thinset					
4600CL-R3-4A-Mastic 1 221802671-0013	Flooring	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4600CL-R3-4A-Flooring ring 221802671-0013A	Flooring	Red Non-Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
4600CL-R3-4A-Mastic 2 221802671-0013B	Flooring	Brown/Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4600CL-R3-4A-Felt 221802671-0013C	Flooring	Black Fibrous Homogeneous	45% Cellulose	55% Non-fibrous (Other)	None Detected
4600CL-R3-4A-Flooring ring 2 221802671-0013D	Flooring	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4600CL-R3-4A-Mastic tic 221802671-0013E	Flooring	Brown/Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4600CL-R3-4A-Felt 221802671-0013F	Flooring	Black Fibrous Homogeneous	45% Cellulose	55% Non-fibrous (Other)	None Detected

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from: 04/24/2018 18:40:32



# EMSL Analytical, Inc.

1010 Yuma Street Denver, CO 80204  
Tel/Fax: (303) 740-5700 / (303) 741-1400  
<http://www.EMSL.com> / [denverlab@emsl.com](mailto:denverlab@emsl.com)

**EMSL Order:** 221802671  
**Customer ID:** ALLP62  
**Customer PO:**  
**Project ID:**

**Attention:** Logan Greenfield  
All-Phase Environmental Consultants, Inc  
721 West 9th Street  
Pueblo, CO 81003  
**Project:** Central 70/ 18-3066 (73)

**Phone:** (719) 250-0036  
**Fax:** (719) 542-2807  
**Received Date:** 04/19/2018 10:00 AM  
**Analysis Date:** 04/24/2018  
**Collected Date:** 04/18/2018

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4600CL-R3-4B-Bac king 221802671-0014	Flooring	White Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	None Detected
White, fibrous material resembling sheet vinyl backing / underlayment on top of floor tile					
4600CL-R3-4B-Floo r Tile 221802671-0014A	Flooring	White/Beige Non-Fibrous Homogeneous		30% Ca Carbonate 68% Non-fibrous (Other)	2% Chrysotile
4600CL-R3-4B-Mast ic 1 221802671-0014B	Flooring	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4600CL-R3-4B-Floo ring 1 221802671-0014C	Flooring	Red Non-Fibrous Homogeneous	15% Cellulose	30% Ca Carbonate 55% Non-fibrous (Other)	None Detected
4600CL-R3-4B-Tar Felt 1 221802671-0014D	Flooring	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
4600CL-R3-4B-Mast ic 2 221802671-0014E	Flooring	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4600CL-R3-4B-Floo ring 2 221802671-0014F	Flooring	Tan Non-Fibrous Homogeneous	15% Cellulose	30% Ca Carbonate 55% Non-fibrous (Other)	None Detected
4600CL-R3-4B-Tar Felt 2 221802671-0014G	Flooring	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
4600CL-R3-4B-Mast ic 3 221802671-0014H	Flooring	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from: 04/24/2018 18:40:32



# EMSL Analytical, Inc.

1010 Yuma Street Denver, CO 80204  
Tel/Fax: (303) 740-5700 / (303) 741-1400  
<http://www.EMSL.com> / [denverlab@emsl.com](mailto:denverlab@emsl.com)

**EMSL Order:** 221802671  
**Customer ID:** ALLP62  
**Customer PO:**  
**Project ID:**

**Attention:** Logan Greenfield  
All-Phase Environmental Consultants, Inc  
721 West 9th Street  
Pueblo, CO 81003  
**Phone:** (719) 250-0036  
**Fax:** (719) 542-2807  
**Received Date:** 04/19/2018 10:00 AM  
**Analysis Date:** 04/24/2018  
**Collected Date:** 04/18/2018  
**Project:** Central 70/ 18-3066 (73)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4600CL-R10-5A-Te xture 221802671-0015	Rough Texture Drywall	White/Purple Non-Fibrous Heterogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
4600CL-R10-5A-Ta pe 221802671-0015A	Rough Texture Drywall	Yellow Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
4600CL-R10-5A-Joi nt Compound 221802671-0015B	Rough Texture Drywall	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
4600CL-R10-5A-Dr ywall 221802671-0015C	Rough Texture Drywall	Gray Fibrous Homogeneous	10% Cellulose <1% Glass	65% Gypsum 25% Non-fibrous (Other)	None Detected
4600CL-R10-5B-TeX ture 221802671-0016	Rough Texture Drywall	Tan/White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
4600CL-R10-5B-Dry wall 221802671-0016A	Rough Texture Drywall	Beige Fibrous Homogeneous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
4600CL-R14-5C-TeX ture 221802671-0017	Rough Texture Drywall	Beige Non-Fibrous Heterogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
4600CL-R14-5C-Dry wall 221802671-0017A	Rough Texture Drywall	Beige Fibrous Homogeneous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
4600CL-R13-5D-TeX ture 221802671-0018	Rough Texture Drywall	White Non-Fibrous Heterogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from: 04/24/2018 18:40:32



# EMSL Analytical, Inc.

1010 Yuma Street Denver, CO 80204  
Tel/Fax: (303) 740-5700 / (303) 741-1400  
<http://www.EMSL.com> / [denverlab@emsl.com](mailto:denverlab@emsl.com)

**EMSL Order:** 221802671  
**Customer ID:** ALLP62  
**Customer PO:**  
**Project ID:**

**Attention:** Logan Greenfield  
All-Phase Environmental Consultants, Inc  
721 West 9th Street  
Pueblo, CO 81003

**Phone:** (719) 250-0036  
**Fax:** (719) 542-2807  
**Received Date:** 04/19/2018 10:00 AM  
**Analysis Date:** 04/24/2018  
**Collected Date:** 04/18/2018

**Project:** Central 70/ 18-3066 (73)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4600CL-R13-5D-Tape 221802671-0018A	Rough Texture Drywall	Yellow Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
4600CL-R13-5D-Joint Compound 221802671-0018B	Rough Texture Drywall	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
4600CL-R13-5D-Drywall 221802671-0018C	Rough Texture Drywall	Beige Fibrous Homogeneous	20% Cellulose	70% Gypsum 10% Non-fibrous (Other)	None Detected
4600CL-R13-5E-Texture 221802671-0019	Rough Texture Drywall	White/Purple Non-Fibrous Heterogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
4600CL-R13-5E-Drywall 221802671-0019A	Rough Texture Drywall	Beige Fibrous Homogeneous	20% Cellulose	70% Gypsum 10% Non-fibrous (Other)	None Detected
4600CL-R14-5F-Texture 221802671-0020	Rough Texture Drywall	White/Beige Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
4600CL-R14-5F-Tape 221802671-0020A	Rough Texture Drywall	Yellow Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
4600CL-R14-5F-Joint Compound 221802671-0020B	Rough Texture Drywall	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
4600CL-R14-5F-Drywall 221802671-0020C	Rough Texture Drywall	Gray Fibrous Homogeneous	10% Cellulose <1% Glass	65% Gypsum 25% Non-fibrous (Other)	None Detected

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from: 04/24/2018 18:40:32



# EMSL Analytical, Inc.

1010 Yuma Street Denver, CO 80204  
Tel/Fax: (303) 740-5700 / (303) 741-1400  
<http://www.EMSL.com> / [denverlab@emsl.com](mailto:denverlab@emsl.com)

**EMSL Order:** 221802671  
**Customer ID:** ALLP62  
**Customer PO:**  
**Project ID:**

**Attention:** Logan Greenfield  
All-Phase Environmental Consultants, Inc  
721 West 9th Street  
Pueblo, CO 81003  
**Phone:** (719) 250-0036  
**Fax:** (719) 542-2807  
**Received Date:** 04/19/2018 10:00 AM  
**Analysis Date:** 04/24/2018  
**Collected Date:** 04/18/2018  
**Project:** Central 70/ 18-3066 (73)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4600CL-R13-5G-Te xture 221802671-0021	Rough Texture Drywall	White Non-Fibrous Heterogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
4600CL-R13-5G-Ta pe 221802671-0021A	Rough Texture Drywall	Tan Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
4600CL-R13-5G-Joi nt Compound 221802671-0021B	Rough Texture Drywall	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
4600CL-R13-5G-Dr ywall 221802671-0021C	Rough Texture Drywall	Brown/Gray Fibrous Homogeneous	15% Cellulose <1% Glass	70% Gypsum 15% Non-fibrous (Other)	None Detected
4600CL-R14-5Q-Te xture 221802671-0022	Rough Texture Drywall	White/Purple Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
4600CL-R14-5Q-Ta pe 221802671-0022A	Rough Texture Drywall	Tan Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
4600CL-R14-5Q-Joi nt Compound 221802671-0022B	Rough Texture Drywall	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
4600CL-R14-5Q-Dr ywall 221802671-0022C	Rough Texture Drywall	Brown/White Fibrous Homogeneous	20% Cellulose	65% Gypsum 15% Non-fibrous (Other)	None Detected
4600CL-R13-6A-Flo oring 221802671-0023	Wood Flooring Mastic	Tan/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from: 04/24/2018 18:40:32



# EMSL Analytical, Inc.

1010 Yuma Street Denver, CO 80204  
Tel/Fax: (303) 740-5700 / (303) 741-1400  
<http://www.EMSL.com> / [denverlab@emsl.com](mailto:denverlab@emsl.com)

**EMSL Order:** 221802671  
**Customer ID:** ALLP62  
**Customer PO:**  
**Project ID:**

**Attention:** Logan Greenfield  
All-Phase Environmental Consultants, Inc  
721 West 9th Street  
Pueblo, CO 81003  
**Phone:** (719) 250-0036  
**Fax:** (719) 542-2807  
**Received Date:** 04/19/2018 10:00 AM  
**Analysis Date:** 04/24/2018  
**Collected Date:** 04/18/2018  
**Project:** Central 70/ 18-3066 (73)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4600CL-R13-6A-Ma stic 221802671-0023A	Wood Flooring Mastic	Brown/Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4600CL-R14-6B-Flo oring 221802671-0024	Wood Flooring Mastic	Brown/White Non-Fibrous Homogeneous		35% Ca Carbonate 65% Non-fibrous (Other)	None Detected
4600CL-R14-6B-Ma stic 221802671-0024A	Wood Flooring Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4600CL-R10-7A 221802671-0025	Duct Wrap	White Fibrous Homogeneous	35% Cellulose	10% Non-fibrous (Other)	55% Chrysotile
4600CL-R10-7B 221802671-0026	Duct Wrap	Gray/Tan Fibrous Homogeneous		40% Non-fibrous (Other)	60% Chrysotile
4600CL-EX-8A-Shin gle 1 221802671-0027	Roofing	Brown/Black Fibrous Homogeneous	8% Glass	92% Non-fibrous (Other)	None Detected
4600CL-EX-8A-Shin gle 2 221802671-0027A	Roofing	Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
4600CL-EX-8A-Felt 221802671-0027B	Roofing	Black Fibrous Homogeneous	45% Cellulose	55% Non-fibrous (Other)	None Detected
4600CL-EX-8B-Shin gle 1 221802671-0028	Roofing	Brown/Black Fibrous Homogeneous	15% Glass	15% Ca Carbonate 70% Non-fibrous (Other)	None Detected
4600CL-EX-8B-Mast ic 221802671-0028A	Roofing	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from: 04/24/2018 18:40:32



# EMSL Analytical, Inc.

1010 Yuma Street Denver, CO 80204  
Tel/Fax: (303) 740-5700 / (303) 741-1400  
<http://www.EMSL.com> / [denverlab@emsl.com](mailto:denverlab@emsl.com)

**EMSL Order:** 221802671  
**Customer ID:** ALLP62  
**Customer PO:**  
**Project ID:**

**Attention:** Logan Greenfield  
All-Phase Environmental Consultants, Inc  
721 West 9th Street  
Pueblo, CO 81003  
**Phone:** (719) 250-0036  
**Fax:** (719) 542-2807  
**Received Date:** 04/19/2018 10:00 AM  
**Analysis Date:** 04/24/2018  
**Collected Date:** 04/18/2018  
**Project:** Central 70/ 18-3066 (73)

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4600CL-EX-8B-Shin gle 2 221802671-0028B	Roofing	Gray/Black Fibrous Homogeneous	15% Glass	15% Ca Carbonate 70% Non-fibrous (Other)	None Detected
4600CL-EX-8B-Tar Felt 221802671-0028C	Roofing	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
4600CL-EX-9A-Shin gle 1 221802671-0029	Roofing	Brown/Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
4600CL-EX-9A-Shin gle 2 221802671-0029A	Roofing	Tan/Black Non-Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
4600CL-EX-9A-Felt 221802671-0029B	Roofing	White Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	None Detected
4600CL-EX-9B-Shin gle 1 221802671-0030	Roofing	Brown/Black Fibrous Homogeneous	15% Glass	15% Ca Carbonate 70% Non-fibrous (Other)	None Detected
4600CL-EX-9B-Mast ic 221802671-0030A	Roofing	Black Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
4600CL-EX-9B-Shin gle 2 221802671-0030B	Roofing	Gray/Black Fibrous Homogeneous	15% Glass	15% Ca Carbonate 70% Non-fibrous (Other)	None Detected
4600CL-EX-9B-Tar Felt 221802671-0030C	Roofing	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from: 04/24/2018 18:40:32



# EMSL Analytical, Inc.

1010 Yuma Street Denver, CO 80204  
Tel/Fax: (303) 740-5700 / (303) 741-1400  
<http://www.EMSL.com> / [denverlab@emsl.com](mailto:denverlab@emsl.com)

**EMSL Order:** 221802671  
**Customer ID:** ALLP62  
**Customer PO:**  
**Project ID:**

**Attention:** Logan Greenfield  
All-Phase Environmental Consultants, Inc  
721 West 9th Street  
Pueblo, CO 81003  
**Project:** Central 70/ 18-3066 (73)

**Phone:** (719) 250-0036  
**Fax:** (719) 542-2807  
**Received Date:** 04/19/2018 10:00 AM  
**Analysis Date:** 04/24/2018  
**Collected Date:** 04/18/2018

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk materials via EPA/600 (0513) Method using Polarized Light Microscopy. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

### Report Comments:

Sample Receipt Date: 04/19/2018      Sample Receipt Time: 10:00 AM  
Analysis Completed Date: 04/24/2018      Analysis Completed Time: 6:39 PM

### **Analyst(s):**

Stuart Printz PLM (36)

Timothy Kleehammer PLM (56)

### **Samples Reviewed and approved by:**

Amanda Lang, Asbestos Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from: 04/24/2018 18:40:32

**EMSL Analytical, Inc.**

1010 Yuma Street, Denver, CO 80204

Phone/Fax: (303) 740-5700 / (303) 741-1400

<http://www.EMSL.com>[denverlab@emsl.com](mailto:denverlab@emsl.com)

EMSL Order:	221802671
CustomerID:	ALLP62
CustomerPO:	
ProjectID:	

Attn: **Logan Greenfield**  
**All-Phase Environmental Consultants, Inc**  
**721 West 9th Street**  
**Pueblo, CO 81003**

Phone: (719) 545-0375  
 Fax: (719) 542-2807  
 Received: 04/19/18 10:00 AM  
 Analysis Date: 4/30/2018  
 Collected: 4/18/2018

Project: **Central 70/ 18-3066 (73)**

### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy. Quantitation using 400 Point Count Procedure

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4600CL-R2-1C-Plaster <i>221802671-0003B</i>	Smooth Plaster	Gray Non-Fibrous  Homogeneous		99.75% Non-fibrous (other)	<b>0.25% Chrysotile</b>
4600CL-R8-1F-Plaster <i>221802671-0006A</i>	Smooth Plaster	Beige Non-Fibrous  Homogeneous		99.50% Non-fibrous (other)	<b>0.50% Chrysotile</b>
4600CL-R5-1G-Plaster <i>221802671-0007B</i>	Smooth Plaster	Tan Non-Fibrous  Homogeneous		100.00% Non-fibrous (other)	<b>&lt;0.25% Chrysotile</b>
4600CL-R1-2A-Plaster <i>221802671-0008B</i>	Rough Plaster	Beige Non-Fibrous  Homogeneous		100.00% Non-fibrous (other)	<b>&lt;0.25% Chrysotile</b>
4600CL-R1-2C-Plaster <i>221802671-0010B</i>	Rough Plaster	Tan Non-Fibrous  Homogeneous		100.00% Non-fibrous (other)	<b>&lt;0.25% Chrysotile</b>

Disclaimer: Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government. EMSL Analytical Inc., bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc., liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.  
 Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from 04/30/2018 15:48:32



**EMSL Analytical, Inc.**

1010 Yuma Street, Denver, CO 80204  
Phone/Fax: (303) 740-5700 / (303) 741-1400  
<http://www.EMSL.com> [denverlab@emsl.com](mailto:denverlab@emsl.com)

EMSL Order: 221802671  
CustomerID: ALLP62  
CustomerPO:  
ProjectID:

Attn: **Logan Greenfield**  
**All-Phase Environmental Consultants, Inc**  
**721 West 9th Street**  
**Pueblo, CO 81003**

Phone: (719) 545-0375  
Fax: (719) 542-2807  
Received: 04/19/18 10:00 AM  
Analysis Date: 4/30/2018  
Collected: 4/18/2018

Project: **Central 70/ 18-3066 (73)**

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy. Quantitation using 400 Point Count Procedure. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

**Report Comments:**

Sample Receipt Date:: 4/19/2018      Sample Receipt Time: 10:00 AM  
Analysis Completed Date: 4/30/2018      Analysis Completed Time: 3:43 PM

**Analyst(s):**

Amanda Lang PLM 400 Point Count (5)

**Samples reviewed and approved by:**

Amanda Lang, Asbestos Laboratory Manager  
or other approved signatory

Disclaimer: Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government. EMSL Analytical Inc., bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc., liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.  
Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from 04/30/2018 15:48:32

4600

EMSL Analytical, Inc.  
1010 Yuma Street



EMSL ANALYTICAL, INC.  
LABORATORY PRODUCTS TRAINING

### Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

221802671

Denver, CO 80204

PHONE: (303) 740-5700

FAX: (303) 741-1400

Company: All-Phase Environmental Consultants, Inc.		EMSL-Bill to: <input type="checkbox"/> Different <input checked="" type="checkbox"/> Same <small>If Bill to is Different note instructions in Comments**</small>	
Street: 721 W. 9th Street		Third Party Billing requires written authorization from third party	
City: Pueblo	State/Province: CO	Zip/Postal Code: 81003	Country: United States
Report To (Name): Logan Greenfield		Telephone #: 719-250-0036	
Email Address: logan@allphaseenvironmental.com		Fax #:	Purchase Order:
Project Name/Number: <u>Control 70 / 18-3066 (13)</u>		Please Provide Results: <input type="checkbox"/> FAX <input checked="" type="checkbox"/> E-mail <input type="checkbox"/> Mail	
U.S. State Samples Taken: CO		Connecticut Samples: <input type="checkbox"/> Commercial <input type="checkbox"/> Residential	

Turnaround Time (TAT) Options\* - Please Check

- 3 Hour  
  6 Hour  
  24 Hour  
  48 Hour  
  72 Hour  
  96 Hour  
  1 Week  
  2 Week

\*For TEM Air 3 hr through 6 hr, please call ahead to schedule. \*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide

<b>PCM - Air</b> <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA	<b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312	<b>TEM- Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167)
<b>PLM - Bulk (reporting limit)</b> <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	<b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5	<b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> TEM Qual. via Filtration Technique <input type="checkbox"/> TEM Qual. via Drop-Mount Technique
<b>TEM - Water: EPA 100.2</b> Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking		<b>Other:</b> <input type="checkbox"/>

Check For Positive Stop - Clearly Identify Homogenous Group      Filter Pore Size (Air Samples):  0.8µm  0.45µm

Samplers Name: Logan Greenfield      Samplers Signature: [Signature]

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
4600 CL - R3-1A	Smooth Plaster		4/18/2018
4600 CL - R4-1B	↓		↓
4600 CL - R2-1C			
4600 CL - R7-1D			
4600 CL - R6-1E			
4600 CL - R8-1F			
4600 CL - R5-1G			
4600 CL - R1-2A		Rough Plaster	

Client Sample # (s): \_\_\_\_\_ Total # of Samples: 31

Relinquished (Client): [Signature] Date: 4/18/2018 Time: 17:00 (10:00 am)

Received (Lab): [Signature] Date: 4/19/18 Time: 11:25 am (3:41/18)

Comments/Special Instructions: EMFE 7954 3939 1507 2/5



EMSL ANALYTICAL, INC  
LABORATORY • PRODUCTS • TRAINING

### Asbestos Chain of Custody

EMSL Order Number (Lab Use Only)

Denver, CO 80204  
Phone (303) 740-5700  
Fax (303) 741-1400

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
4200 CL- R1-2B	Rough PLASTER		4/18/18
4200 CL- R1-2C	↓		↑
4200 CL- R3-3A	CERAMIC TILE MASTIC		
4700 CL- R3-3B	↓		
4700 CL- R3-4A	FLOORING		
4700 CL- R3-4B	↓		
4700 CL- R10-5A	Rough TEXTURE DRY WALL		
4700 CL- R10-5B	↓		
4700 CL R14-5C			
4700 CL- R13-5D			
4700 CL- R13-5E	↓		
4700 CL- R14-5F	Rough TEXTURE DRY WALL		
4700 CL- R13-5G	↓		
4700 CL- R14-5Q			
4700 CL- R13-6A	WOOD FLOORING MASTIC		
4700 CL- R14-6B	↓		
4700 CL- R10-7A	DUCT WRAP		
4700 CL- R10-7B	↓		
4700 CL- EX-8A	ROOFING		
4700 CL- EX-8B	↓		
4700 CL- EX-9A			
4700 CL- EX-9B	↓		
*Comments/Special Instructions:			



# EMSL Analytical, Inc.

1010 Yuma Street Denver, CO 80204  
Tel/Fax: (303) 740-5700 / (303) 741-1400  
<http://www.EMSL.com> / [denverlab@emsl.com](mailto:denverlab@emsl.com)

**EMSL Order:** 221805959  
**Customer ID:** ALLP62  
**Customer PO:**  
**Project ID:**

**Attention:** Logan Greenfield  
All-Phase Environmental Consultants, Inc  
721 West 9th Street  
Pueblo, CO 81003  
**Phone:** (719) 250-0036  
**Fax:** (719) 542-2807  
**Received Date:** 08/02/2018 9:00 AM  
**Analysis Date:** 08/03/2018  
**Collected Date:** 08/02/2018  
**Project:** 18-3066-CDOT-A-AP73

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4600C-R6-7C 221805959-0001	Duct Wrap	Tan/White Fibrous Homogeneous		20% Non-fibrous (Other)	80% Chrysotile

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Initial report from: 08/03/2018 12:26:50



# EMSL Analytical, Inc.

1010 Yuma Street Denver, CO 80204  
Tel/Fax: (303) 740-5700 / (303) 741-1400  
<http://www.EMSL.com> / [denverlab@emsl.com](mailto:denverlab@emsl.com)

**EMSL Order:** 221805959  
**Customer ID:** ALLP62  
**Customer PO:**  
**Project ID:**

**Attention:** Logan Greenfield  
All-Phase Environmental Consultants, Inc  
721 West 9th Street  
Pueblo, CO 81003  
**Project:** 18-3066-CDOT-A-AP73

**Phone:** (719) 250-0036  
**Fax:** (719) 542-2807  
**Received Date:** 08/02/2018 9:00 AM  
**Analysis Date:** 08/03/2018  
**Collected Date:** 08/02/2018

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk materials via EPA/600 (0513) Method using Polarized Light Microscopy. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

**Report Comments:**

Sample Receipt Date:	08/02/2018	Sample Receipt Time:	9:00 AM
Analysis Completed Date:	08/03/2018	Analysis Completed Time:	12:21 PM

**Analyst(s):**

*Amanda Lang*

Amanda Lang PLM (1)

**Samples Reviewed and approved by:**

*Amanda Lang*

Amanda Lang, Asbestos Laboratory Manager  
or other approved signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Initial report from: 08/03/2018 12:26:50

8/3



**Asbestos Chain of Custody**  
EMSL Order Number (Lab Use Only):

221805959

Denver, CO 80204  
PHONE: (303) 740-5700  
FAX: (303) 741-1400

EMSL ANALYTICAL, INC.  
LABORATORY PRODUCTS TRAINING

Company: All-Phase Environmental Consultants, Inc.		EMSL-Bill to: <input type="checkbox"/> Different <input checked="" type="checkbox"/> Same <small>If Bill to is Different note instructions in Comments**</small>	
Street: 721 W. 9th Street		Third Party Billing requires written authorization from third party	
City: Pueblo	State/Province: CO	Zip/Postal Code: 81003	Country: United States
Report To (Name): Logan Greenfield		Telephone #: 719-250-0036	
Email Address: logan@allphaseenvironmental.com		Fax #:	Purchase Order:
Project Name/Number: 18-3066-CDOT-A-APT3		Please Provide Results: <input type="checkbox"/> FAX <input checked="" type="checkbox"/> E-mail <input type="checkbox"/> Mail	
U.S. State Samples Taken: CO		Connecticut Samples: <input type="checkbox"/> Commercial <input type="checkbox"/> Residential	

**Turnaround Time (TAT) Options\* - Please Check**

3 Hour  6 Hour  24 Hour  48 Hour  72 Hour  96 Hour  1 Week  2 Week

\*For TEM Air 3 hr through 6 hr, please call ahead to schedule. \*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

<b>PCM - Air</b> <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	<b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <b>TEM - Water: EPA 100.2</b> Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	<b>TEM- Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> TEM Qual. via Filtration Technique <input type="checkbox"/> TEM Qual. via Drop-Mount Technique <b>Other:</b> <input type="checkbox"/>
---	--	---

Check For Positive Stop - Clearly Identify Homogenous Group | Filter Pore Size (Air Samples):  0.8µm  0.45µm

Samplers Name: Logan Greenfield | Samplers Signature: [Signature]

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
4600C-R6-7C	Duct Wrap	—	8-2-18
<del> </del>			

Client Sample # (s): - Total # of Samples: 1

Relinquished (Client): [Signature] Date: 8-2-18 Time: 9:00

Received (Lab): TI Date: 8/2/18 Time: 9:00 AM

Comments/Special Instructions: W.J

**D**

LABORATORY RESULTS &  
CHAIN OF CUSTODY -  
LEAD & TCLP





# EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 786-5974

<http://www.EMSL.com>

[cinnaminsonleadlab@emsl.com](mailto:cinnaminsonleadlab@emsl.com)

EMSL Order:	201804174
CustomerID:	ALLP62
CustomerPO:	
ProjectID:	

Attn: **Richard Ralston**  
**All-Phase Environmental Consultants, Inc**  
**721 West 9th Street**  
**Pueblo, CO**

Phone: (719) 225-6953  
 Fax: (719) 542-2807  
 Received: 04/19/18 10:20 AM  
 Collected:

Project: **Central 70 / 18-3066-007**

## Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)\*

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Weight</i>	<i>Lead Concentration</i>
4200-R1-1 Site: Red E Wall	201804174-0001		4/21/2018	0.2501 g	<0.0080 % wt
4200-R1-2 Site: White N Wall	201804174-0002		4/21/2018	0.2507 g	<0.0080 % wt
4200-R6-3 Site: Pink S Wall	201804174-0003		4/21/2018	0.2620 g	<0.0080 % wt
4200- R7-4 Site: White Door Frame	201804174-0004		4/21/2018	0.2893 g	0.047 % wt
4200 Stairs-5 Site: Blue Steps to Basement	201804174-0005		4/21/2018	0.2515 g	0.023 % wt
4200 R10-6 Site: WDU Basement	201804174-0006		4/21/2018	0.2556 g	<0.0080 % wt
4200 R13-7 Site: Purple	201804174-0007		4/21/2018	0.2614 g	<0.0080 % wt
4200 R13Q- 8 Site: Purple	201804174-0008		4/21/2018	0.2525 g	<0.0080 % wt
4200 Out-9 Site: Brown Outside Paint	201804174-0009		4/21/2018	0.2776 g	<0.0080 % wt
4200 Out-10 Site: Exterior Door- White	201804174-0010		4/21/2018	0.2726 g	<0.0080 % wt
4200 Garage-11 Site: Tan	201804174-0011		4/21/2018	0.2664 g	0.21 % wt

Phillip Worby, Lead Laboratory Manager  
or other approved signatory

\*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, AIHA-LAP, LLC ELLAP 100194, A2LA 2845.01

Initial report from 04/23/2018 10:11:32

4200



EMSL ANALYTICAL, INC.  
LABORATORY PRODUCTS TRAINING

**Chain of Custody**  
EMSL Order Number (Lab Use Only):

201804174

EMSL  
200 Route 130 North  
Cinnaminson NJ 08077  
Phone (800) 220-3675  
Fax (856) 858-3502

PHONE  
FAX:

Company: All Phase Environmental		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 721 9th Street		Third Party Billing requires written authorization from third party	
City: Pueblo	State/Province: CO	Zip/Postal Code:	Country:
Report To (Name): Richard Racso		Telephone #:	
Email Address: Rick@allphaseenv.com		Purchase Order:	
Project Name/Number: CENTRAL 70 / 18-3066-007		Please Provide Results: <input type="checkbox"/> Fax <input type="checkbox"/> Email <input type="checkbox"/> Mail	
U.S. State Samples Taken: Colorado		Connecticut Samples: <input type="checkbox"/> Commercial <input type="checkbox"/> Residential	

**Turnaround Time (TAT) Options\* - Please Check**

3 Hour  6 Hour  24 Hour  48 Hour  72 Hour  96 Hour  1 Week  2 Week

\*For RUSH TAT's Please Call Ahead to Confirm Lab Hours and Availability. Not all TAT options are valid for every test. Materials Science and IAQ TATs are in Business Days rather than Hours (i.e. 24 Hour = End of Next Business Day)

**Asbestos**

<b>PCM - Air</b> <input type="checkbox"/> NIOSH 7400 w/ 8hr. TWA <b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT(AHERA ONLY) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Water</b> Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	<b>PLM - Bulk</b> <input type="checkbox"/> PLM EPA 600/R-93/116 <input type="checkbox"/> PLM EPA NOB (<1%) <input type="checkbox"/> NYS 198.1 (friable-NY) <input type="checkbox"/> NYS 198.6 (non-friable-NY) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/ Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	<b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> EPA Reg. 1 Screening Protocol (Qualitative) <b>Other:</b>
--	--	--

**Lead (Pb)**

<b>Flame Atomic Absorption</b> <input checked="" type="checkbox"/> Chips SW846-7000B or AOAC 974.02 <input type="checkbox"/> Soil SW846-7000B/7420 <input type="checkbox"/> Air NIOSH 7082 <input type="checkbox"/> Wastewater SM3111B or SW846-7000B/7420 <input type="checkbox"/> ASTM Wipe SW846-7000B/7420 <input type="checkbox"/> non ASTM Wipe SW846-7000B/7420 <input type="checkbox"/> TCLP SW846-1311/7420/SM 3111B	<b>ICP</b> <input type="checkbox"/> Air NIOSH 7300 Modified <input type="checkbox"/> non ASTM Wipe SW846-6010B or C <input type="checkbox"/> ASTM Wipe SW846-6010B or C <input type="checkbox"/> Soil SW846-6010 B or C <input type="checkbox"/> Waste Water SW846-6010B or C <input type="checkbox"/> TCLP SW846-6010B or C
<b>Graphite Furnace Atomic Absorption</b> <input type="checkbox"/> Soil SW846-7421 <input type="checkbox"/> Wastewater EPA 200.9 <input type="checkbox"/> Air NIOSH 7105 <input type="checkbox"/> Drinking Water EPA 200.9	<b>Other:</b> <input type="checkbox"/>

**Materials Science**

Common Particle ID (large particles)  
 Full Particle ID (environmental dust)  
 Basic Material ID (solids)  
 Advanced Material ID  
 Physical Testing (Tensile, Compression)  
 Combustion-by-products (soot, char, etc.)  
 X-Ray Fluorescence (elem. analysis)  
 X-Ray Diffraction (Crystalline Part.)  
 MMVF's (Fibrous glass, RCF's)  
 Particle Size (sieve/microscopy/laser)  
 Combustible Dust  
 Petrographic Examination  
**Other:**

**Microbiology**

<b>Wipe and Bulk Samples</b> <input type="checkbox"/> Mold & Fungi - Direct Examination <input type="checkbox"/> Mold & Fungi Culture (Genus Only) <input type="checkbox"/> Mold & Fungi Culture (Genus & Species) <input type="checkbox"/> Bacterial Count & ID (Up to Three Types) <input type="checkbox"/> Bacterial Count & ID (Up to Five Types) <input type="checkbox"/> MRSA <input type="checkbox"/> Pseudomonas aeruginosa	<b>Air Samples</b> <input type="checkbox"/> Mold & Fungi (Spore Trap) <input type="checkbox"/> Mold & Fungi Culture (Genus Only) <input type="checkbox"/> Mold & Fungi (Genus & Species) <input type="checkbox"/> Bacterial Culture & ID (Up to Three Types) <input type="checkbox"/> Bacterial Culture & ID (Up to Five Types) <input type="checkbox"/> Endotoxin Testing <b>Real Time Q-PCR</b> (See Analytical Guide for Code) Code: _____ <b>Legionella</b> <input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <b>Other:</b> <input type="checkbox"/>
<b>Water Samples</b> <input type="checkbox"/> Total Coliform & E.coli (P/A) <input type="checkbox"/> Fecal Coliform (SM 9222D) <input type="checkbox"/> Sewage Screen <input type="checkbox"/> Heterotrophic Plate Count (SM 9215)	

**IAQ**

Nuisance Dust NIOSH  0500  0600  
 Airborne Dust  PM10  TSP  
 Silica Analysis:  All Species  
 Silica Analysis - Single Species  
 Alpha Quartz  Cristobalite  Tridymite  
 HVAC Efficiency  
 Carbon Black  
 Airborne Oil Mist  
 Radon Testing: Call for Kit and COC  
**Other:**

**\*\*Comments/Special Instructions:**

Client Sample #'s	-	Total # of Samples:
Relinquished (Client): R. Rabston	Date: 04/18/18	Time: 17:00
Received (Lab): [Signature]	Date: 4/19/18	Time: 10:20 AM [Signature]

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide



EMSL ANALYTICAL, INC.  
LABORATORY • PRODUCTS • TRAINING

**Chain of Custody**  
EMSL Order Number (Lab Use Only):

201804174

PHONE:  
FAX:

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1 4200-R <sub>1</sub> -1	Red. (E) wall		
2 4200-R <sub>1</sub> -2	White (N) wall		
3 4200-R <sub>6</sub> -3	Pink (S) wall		
4 4200-R <sub>7</sub> -4	White DOOR FRAME		
5 4200 stairs 5	Blue Steps to Basement		
6 4200 R <sub>10</sub> -6	Wall Basement		
7 4200 R <sub>11</sub> -7	Purple		
8 4200 R <sub>13</sub> Q-8	Purple		
9 4200 out 9	Gramp outside paint		
10 4200 out 10	EXTERIOR DOOR - white		
11 4200 GARAGE 11	TAU		
*Comments/Special Instructions:			

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide



# EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 786-5974

<http://www.EMSL.com>

[cinnaminsonleadlab@emsl.com](mailto:cinnaminsonleadlab@emsl.com)

EMSL Order:	201804155
CustomerID:	ALLP62
CustomerPO:	
ProjectID:	

Attn: **Richard Ralston**  
**All-Phase Environmental Consultants, Inc**  
**721 West 9th Street**  
**Pueblo, CO**

Phone: (719) 225-6953  
 Fax: (719) 542-2807  
 Received: 04/19/18 10:20 AM  
 Collected:

Project: **Central 70 / 18-3066.**

## Test Report: Toxicity Characteristic Leachate Procedure (1311/7000B)

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Lead Concentration</i>
4200-TCLP-1	201804155-0001		4/20/2018	<0.40 mg/L
Site: Throughout Building				

Phillip Worby, Lead Laboratory Manager  
or other approved signatory

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367

Initial report from 04/24/2018 09:48:18

EMSL ANALYTICAL, INC.  
200 Route 130 North  
Cinnaminson NJ 08077  
Phone (800) 220-3675  
Fax (856) 858-3502

4200



EMSL ANALYTICAL, INC.  
LABORATORY PRODUCTS TRAINING

# Chain of Custody

EMSL Order Number (Lab Use Only)

201804155

PHONE:  
FAX:

Company: All Phase Environmental		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 721 9th Street		Third Party Billing requires written authorization from third party	
City: Pueblo	State/Province: CO	Zip/Postal Code:	Country:
Report To (Name): Richard Racso		Telephone #:	
Email Address: Rick@allphaseenvironmental.com		Purchase Order:	
Project Name/Number: CENTRAL 70 / 18-3066-		Please Provide Results: <input type="checkbox"/> Fax <input type="checkbox"/> Email <input type="checkbox"/> Mail	
U.S. State Samples Taken: Colorado		Connecticut Samples: <input type="checkbox"/> Commercial <input type="checkbox"/> Residential	

### Turnaround Time (TAT) Options\* - Please Check

3 Hour  
 6 Hour  
 24 Hour  
 48 Hour  
 72 Hour  
 96 Hour  
 1 Week  
 2 Week

\*For RUSH TAT's Please Call Ahead to Confirm Lab Hours and Availability. Not all TAT options are valid for every test. Materials Science and IAQ TATs are in Business Days rather than Hours (i.e. 24 Hour = End of Next Business Day)

### Asbestos

<b>PCM - Air</b> <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ 8hr. TWA <b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT(AHERA ONLY) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Water</b> Fibers > 10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	<b>PLM - Bulk</b> <input type="checkbox"/> PLM EPA 600/R-93/116 <input type="checkbox"/> PLM EPA NOB (<1%) <input type="checkbox"/> NYS 198.1 (friable-NY) <input type="checkbox"/> NYS 198.6 (non-friable-NY) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/ Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	<b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> EPA Reg. 1 Screening Protocol (Qualitative) <b>Other:</b>
<b>TEM - Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe-ASTM D6480		

### Lead (Pb)

<b>Flame Atomic Absorption</b> <input type="checkbox"/> Chips SW846-7000B or AOAC 974.02 <input type="checkbox"/> Soil SW846-7000B/7420 <input type="checkbox"/> Air NIOSH 7082 <input type="checkbox"/> Wastewater SM3111B or SW846-7000B/7420 <input type="checkbox"/> ASTM Wipe SW846-7000B/7420 <input type="checkbox"/> non ASTM Wipe SW846-7000B/7420 <input checked="" type="checkbox"/> TCLP SW846-1311/7420/SM 3111B	<b>ICP</b> <input type="checkbox"/> Air NIOSH 7300 Modified <input type="checkbox"/> non ASTM Wipe SW846-6010B or C <input type="checkbox"/> ASTM Wipe SW846-6010B or C <input type="checkbox"/> Soil SW846-6010 B or C <input type="checkbox"/> Waste Water SW846-6010B or C <input type="checkbox"/> TCLP SW846-6010B or C
<b>Graphite Furnace Atomic Absorption</b> <input type="checkbox"/> Soil SW846-7421 <input type="checkbox"/> Wastewater EPA 200.9 <input type="checkbox"/> Air NIOSH 7105 <input type="checkbox"/> Drinking Water EPA 200.9	<b>Other:</b> <input type="checkbox"/>

### Materials Science

Common Particle ID (large particles)  
 Full Particle ID (environmental dust)  
 Basic Material ID (solids)  
 Advanced Material ID  
 Physical Testing (Tensile, Compression)  
 Combustion-by-products (soot, char, etc.)  
 X-Ray Fluorescence (elem. analysis)  
 X-Ray Diffraction (Crystalline Part.)  
 MMVF's (Fibrous glass, RCF's)  
 Particle Size (sieve/microscopy/laser)  
 Combustible Dust  
 Petrographic Examination  
**Other:**

### Microbiology

<b>Wipe and Bulk Samples</b> <input type="checkbox"/> Mold & Fungi - Direct Examination <input type="checkbox"/> Mold & Fungi Culture (Genus Only) <input type="checkbox"/> Mold & Fungi Culture (Genus & Species) <input type="checkbox"/> Bacterial Count & ID (Up to Three Types) <input type="checkbox"/> Bacterial Count & ID (Up to Five Types) <input type="checkbox"/> MRSA <input type="checkbox"/> Pseudomonas aeruginosa	<b>Air Samples</b> <input type="checkbox"/> Mold & Fungi (Spore Trap) <input type="checkbox"/> Mold & Fungi Culture (Genus Only) <input type="checkbox"/> Mold & Fungi (Genus & Species) <input type="checkbox"/> Bacterial Culture & ID (Up to Three Types) <input type="checkbox"/> Bacterial Culture & ID (Up to Five Types) <input type="checkbox"/> Endotoxin Testing
<b>Water Samples</b> <input type="checkbox"/> Total Coliform & E.coli (P/A) <input type="checkbox"/> Fecal Coliform (SM 9222D) <input type="checkbox"/> Sewage Screen <input type="checkbox"/> Heterotrophic Plate Count (SM 9215)	<b>Real Time Q-PCR</b> (See Analytical Guide for Code) Code: <b>Legionella</b> <input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <b>Other:</b> <input type="checkbox"/>

### IAQ

Nuisance Dust NIOSH  0500  0600  
 Airborne Dust  PM10  TSP  
 Silica Analysis:  All Species  
 Silica Analysis - Single Species  
 Alpha Quartz  Cristobalite  Tridymite  
 HVAC Efficiency  
 Carbon Black  
 Airborne Oil Mist  
 Radon Testing: Call for Kit and COC  
**Other:**

### \*\*Comments/Special Instructions:

Client Sample #'s		Total # of Samples:	
Relinquished (Client): R. Ralston	Date: 4/18/18	Time: 17:00	
Received (Lab): [Signature]	Date: 4/19/18	Time: 10:20 AM [Signature]	

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide



## 6b. Asbestos Abatement Project Design



**Foothills  
Environmental, Inc.**

Industrial Hygiene, Safety & Environmental Services

---

**(Version 1, 11/30/18)**

**ASBESTOS ABATEMENT  
PROJECT DESIGN**

**SINGLE FAMILY RESIDENCE ABATEMENT PROJECT**

**4600 CLAYTON STREET  
DENVER, COLORADO 80216**

**PREPARED FOR:**

**JKS Industries, LLC  
747 Sheridan Blvd., #9A  
Lakewood, Colorado 80214**

November 30, 2018

FEI Project Number: AS18207-12

Prepared By:

Nicolas D. Vasquez, CDPHE Cert #22566  
Foothills Environmental

Foothills Environmental, Inc.  
11099 W. 8<sup>th</sup> Ave.  
Lakewood, Colorado 80215  
Phone: 303-232-2660

Table of Contents

1.0	Scope of Work.....	4
1.1	Materials Identified for Removal.....	4
1.2	Schedule.....	4
1.3	Sequence of Work.....	4
1.4	Discussion of Removal Methods .....	5
2.0	Special Conditions .....	6
2.1	Regulatory Notification and Variances.....	6
2.2	Project Manager Requirement .....	7
2.3	Facility Occupancy Status.....	7
2.4	Site Security.....	7
2.5	Field Changes .....	7
3.0	Project Design .....	7
3.1	Standards and Primacy of Rules .....	7
3.2	Site Access.....	8
3.3	Utilities Service.....	8
3.4	Decontamination Facilities & Load-Out Facilities .....	8
3.5	Pre-Cleaning .....	8
3.6	Critical Barriers.....	8
3.7	Negative Pressure Ventilation.....	8
3.8	Air Exchange Calculations .....	9
3.9	Containment Construction .....	9
3.10	Set up of work areas.....	9
3.11	Asbestos Removal.....	10
3.12	Asbestos Spill Response .....	10
3.13	Asbestos Waste Transportation, Storage, and Disposal.....	10
	Waste Disposal:.....	11
	Waste Transporter: .....	11
3.14	Final Clean/ Final Visual Inspection Criteria.....	11
3.15	Final Air Clearance Monitoring.....	11
3.16	Personal Exposure Air Monitoring .....	12
3.17	Electrical Hazards Control.....	12
3.18	Emergency Egress and Fire Protection .....	12
3.19	Fire Protection Plan .....	12
3.20	Fall Protection.....	12
3.21	Respiratory Protection / PPE .....	12
3.22	Work Area Protection .....	12
3.23	Additional PPE .....	13
3.24	Pre-Abatement Document Submittal .....	13

APPENDIX A – Drawings

APPENDIX B – Certificates

## 1.0 Scope of Work

### 1.1 Materials Identified for Removal

The General Abatement Contractor (GAC) will be performing the removal of asbestos containing material(s) as indicated in the table below. This information was gathered from the inspection report prepared by All-Phase Environmental Consultants (APEC) dated June 16, 2018. A copy of the Inspection and this Project Design will be available onsite during the course of the project. The total amount of actual asbestos containing material to be removed on this project is estimated to be greater than 160 sf/260 lf or the equivalent of a 55 gallon drum.

**The following ACM was identified for removal prior to demolition:**

Sample Name	Sample Location	Lab Results/ Asbestos Type	Detection Method(s)	Condition	Material Description	Material Location	NESHAP Classification	Estimated Quantity (Sq. ft.)
4600CL-R3-4B	ROOM 3	Floor Tile	PLM	Good	Flooring/Floor Tile	Bottom Layer Flooring in rooms 3, 4 & 5	Cat I	338
4600CL-R3-4A	Homogeneous to Sample - 4600CL-R3-4B							
4600CL-R10-7A	ROOM 10	DUCT WRAP 55% Chrysotile	PLM	Good	DUCT WRAP	Supply duct registers in rooms 3 & 6-can be seen in room 10 (basement)	RACM	10
4600CL-R10-7B		DUCT WRAP 60% Chrysotile	PLM	Good				
ND=Non-Detect PLM=Polarized Light Microscopy NA=Not Applicable RACM=Regulated Asbestos Containing Materials								

Regulatory asbestos abatement notification and permit from the Colorado Department of Public Health and Environment (CDPHE) will be required for this project.

### 1.2 Schedule

The following schedule has been proposed for the project. Phasing and dates are included in Section 1.3, Sequence of Work.

Project Start Date: December 10, 2018

Project Completion Date: December 21, 2018

### 1.3 Sequence of Work

The following phasing plan has been developed for the abatement. This plan was submitted with the permit application which corresponds to the drawing attached in Appendix A.

- **Phase 1** Start: December 10, 2018  
Finish: December 21, 2018

Abatement of ACM vent wrap and ACM floor tile in all designated areas will be completed in one secondary containment.

#### **1.4 Discussion of Removal Methods**

All friable asbestos-containing vent wrap and non-friable asbestos containing floor tile, as well as asbestos contaminated materials that are located in the work area shall be removed from their installed locations inside a secondary containment and by utilizing wet removal methods and a combination of handheld tools. All friable asbestos-containing vent wrap will be removed via facility component removal methods.

Waste generated during removal will be gathered wrapped with 6ml thick polyethylene sheeting while wet. Work will be accomplished using CDPHE certified supervisors and workers.

Work completion includes preparation of the work area, pre-clean activities, removal and disposal of all specified ACM from the premises, final cleaning of the work area, final visual inspection, lockdown, and final clearance monitoring. The project will be considered complete when all containments and work areas have passed clearance criteria.

The following types of containments will be used during the project followed by procedures for setup and dismantling:

##### **Secondary Containments**

The GAC shall conduct abatement activities in accordance with CDPHE Regulation No. 8 in the following mandatory sequence for secondary containment:

- 1) Install critical barriers (pursuant to subsection III.I, Critical Barrier Installation)
- 2) Establish negative pressure (pursuant to Regulation No. 8 subsection III.J, Air Cleaning and Negative Pressure Requirements)

*Note: The removal of non-ACM building materials and components may only take place after negative air pressure is established in the containment work area(s).*

- 3) Construct the decontamination area (pursuant to subsection III.K, Decontamination Area)
- 4) Pre-clean surfaces (pursuant to subsection III.L, Pre-cleaning of Surfaces)
- 5) Cover fixed objects (pursuant to subsection III.M, Covering Fixed Objects)
- 6) Construct the containment (pursuant to subsection III.N.4, Secondary Containment)
- 7) Conduct abatement (pursuant to subsection III.V.2, Facility Component Removal and subsection III.S.1 Resilient Floor Tile and Sheet Vinyl Flooring)
- 8) Conduct final visual inspection (pursuant to paragraph III.P.1., Final Visual Inspection)
- 9) Conduct final clearance air monitoring (pursuant to paragraph III.P.3., Final Clearance Air Monitoring)
- 10) Conduct the tear-down (pursuant to subsection III.Q., Tear-down)

Floor tiles and vent wrap will be removed by using Secondary Containments (modified number of layers of walls and ceilings, negative pressure, airtight barriers, and decontamination units adjacent to each work area). If mechanical means are used for removal of flooring, then procedures must resort to Regulation No. 8 requirements for friable ACM removal. The following procedures will be utilized for removal using secondary containments:

- Work will be performed using critical barriers, secondary containment and negative air flow through a HEPA filter vented to the exterior. Each work area will be secured against entry by any unauthorized or untrained person throughout the Work. Warning signs will be posted and temporary barricades erected.
- Contractor will confirm negative pressure can be maintained prior to start of abatement.
- VAT and mastic may be located under carpeting or other non-asbestos materials. Note: Overlying non-asbestos materials may be removed as non-asbestos debris as long as the underlying asbestos materials are not attached during removal.
- VAT will be removed so that it does not become friable during removal. Floor tiles will be removed without breakage and placed in disposal bags. Work area will be misted continuously with amended water whenever necessary to reduce airborne fiber counts. Excess water will be controlled, so that leakage does not occur to underlying materials and floors.
- Removal of VAT will be performed with wet methods, spud bars and hand scrapers. Heating and/or the application of dry ice may be used also. Power tools, grinders or other machines that may produce dust during removal of VAT will not be allowed.
- Vinyl asbestos floor tile will be removed down to existing floor with minimal damage to the floor. No sanding or dry scraping is allowed.
- Floor mastic will remain in the building for demolition.
- If floor mastic is removed in any area, solvents may be used to remove mastic but odors shall not cause adverse effects to workers or occupants. The Contractor will utilize the solvent in accordance with all manufacturer guidelines and OSHA regulations. IH representative for GSA must review Safety Data Sheets (SDS) for solvent materials prior to use. Floors will be washed with soap and water after use of solvents. If solvents cause adverse impact to occupants or workers, then the type of solvent shall be changed or discontinued.

Clean the entire floor using a wet/dry vacuum cleaner equipped with a HEPA filtration system. Do not sweep. After removal of VAT, proceed with decontamination and final inspection and clearance testing of the Work Area according to Sections 3.13 and 3.14.

All waste from the project will be packaged in approved containers and transferred to an approved landfill for disposal. After successful air clearance of each containment the containment can be removed and all non-reusable containment materials will be packaged for disposal.

## **2.0 Special Conditions**

### **2.1 Regulatory Notification and Variances**

The General Abatement Contractor, (GAC) will make any required notifications to Federal and State entities regulating their work as required by applicable rules, regulations, and standards. This includes, but is not limited, to the National Emission Standards for Hazardous

Air Pollutants (NESHAP) notification [notice provided to the Colorado Department of Public Health and Environment (CDPHE) with permit application]. *The abatement contractor is responsible for quantifying amounts of ACM necessary to properly complete the project.*

## **2.2 Project Manager Requirement**

Colorado Regulation No. 8 requires a Project Manager on all asbestos abatement projects in which the amount of friable ACM to be abated exceeds 1,000 linear feet on pipes, or 3,000 square feet on other surfaces. A Project Manager may be required for this project, unless a waiver is requested and granted by CDPHE.

## **2.3 Facility Occupancy Status**

During abatement activities the building will not be occupied by the former tenants but may be visited by owner personnel as well as other tradesmen.

## **2.4 Site Security**

Entry to the regulated asbestos work area is by permission only to authorized personnel. The perimeter of the work area may be monitored during abatement by a certified Air Monitoring Specialist (AMS). Only asbestos certified/licensed personnel employed by the GAC or federal or state regulatory agency personnel and the AMS will be allowed access to the work area. A logbook will be maintained at the entrance to the work area. Everyone who enters the work area must record name, affiliation, time in and time out for each entry.

## **2.5 Field Changes**

Minor modifications to the project design are allowed. Minor changes include but are not limited to, relocation of negative air machines, decontamination facility and waste load-out. Any modifications to the project design must be approved by the Project Designer before the changes are made.

## **3.0 Project Design**

### **3.1 Standards and Primacy of Rules**

The following standards will be adopted as they pertain to asbestos abatement. In any instance where adopted standards are in conflict with each other, the most stringent shall apply.

- 1) Colorado Department of Public Health and Environment Regulation #8
- 2) 5CCR 1000-10 Part B asbestos handling, transportation, and storage
- 3) 29 CFR 1926.1101, the OSHA Construction Industry Asbestos Standard
- 4) 40 CFR 61 Subpart M, EPA's NESHAP Asbestos Standard
- 5) NIOSH/OSHA/EPA –“Occupational; Safety & Health Guidance Manual for Hazardous Waste Site Activities”, Section 8-20; Heat Stress and Other Physiological Factors.
- 6) All other applicable laws, rules, and regulations, including but not limited to those relating to:
  - 7) Workers' Compensation Insurance;
  - 8) Liability Insurance
  - 9) All contract specifications, drawings, and documentation

### **3.2 Site Access**

The GAC has access to the facility for the purpose of abatement from 6:30 AM to 5:00 PM until project completion which is projected to be 12/21/18.

### **3.3 Utilities Service**

Access to electrical power, water and sanitary sewer is not available inside the facility. The contractor will provide utility services during the duration of the project. Any temporary utility lines running to the regulated asbestos work area shall be adequately protected from damage and abrasion from vehicle and foot traffic. All waste water shall be filtered to five (5) microns prior to discharge into a sanitary sewer.

GAC will have to provide temporary restrooms located close to the project site at approved locations for the duration of the project (to be placed in a protected area if possible).

### **3.4 Decontamination Facilities & Load-Out Facilities**

Personnel decontamination facilities shall consist of an Equipment (Dirty) Room, Shower, and a clean room constructed in accordance with Regulation #8 III.K Decontamination Unit.

All load-out and disposal procedures shall be in accordance with applicable federal, state, and local regulations and project specifications. Construction shall consist of a minimum of two separate chambers separated by airlocks.

For Secondary containments, personnel decontamination facilities shall consist of a minimum of two separate chambers separated by airlocks directly adjacent to the secondary containment. The first chamber shall contain a HEPA vacuum for decontaminating protective clothing before doffing and disposing of it in a standard asbestos waste bag.

### **3.5 Pre-Cleaning**

Pre-cleaning activities will be performed in accordance with CDPHE Regulation 8. All workers performing pre-cleaning must utilize HEPA equipped vacuums and wet methods. Any prepping activities that will contact non-friable ACM, or be within arms' reach of friable ACM must be accomplished by workers utilizing PPE.

### **3.6 Critical Barriers**

All critical barriers will consist of a minimum 1 layer of 6mil poly critical barrier on all, openings, and vents.

### **3.7 Negative Pressure Ventilation**

The GAC shall maintain a negative pressure differential of -0.02 inches of water in the work areas in accordance with Regulation #8 III.J Air cleaning and Negative Pressure Requirements, until final visual and clearance air monitoring complete. The calculations in the next section take into account at least 1 backup Negative Air Machine (NAM) with HEPA filtration. The contractor will also be using generators for maintaining electrical supply. In the case of generator failure, all workers will leave the work area and seal the containment. A replacement generator will be available onsite or within an hour's time of the project for use in case of failure. Work will resume when negative pressure is restored. If negative pressure is not restored within an hour's time alternate means of electrical supply will be sought. If no supply is available, contractor will contact CDPHE and follow directions for spill response.

### 3.8 Air Exchange Calculations

#### AIR CHANGE CALCULATIONS *for a 2000 cfm negative air machine (NAM)*

$$\text{AIR CHANGES} = \frac{A}{B \times C} \quad \text{Where: } A = \text{Work area volume in cubic feet } (l \times w \times h)$$

$B = 15 \text{ minutes}$   
 $C = \text{Estimated rated capacity of NAM (1,500 cfm)}$

#### Phase 1 – Vent Wrap and Floor Tiles (Secondary Containment 1)

$$\begin{aligned} A &= 12 \times 10 \times 9 = 1080 \text{ cubic feet} \\ B \times C &= 22,500 \\ \frac{1080}{22,500} &= 0.05 \end{aligned}$$

1 NAM required  
2 NAM's recommended

**Note:** Containment has several dead spaces where there is no air movement. Therefore an extra NAM is recommended to improve air movement in the containment. See containment configurations on drawings.

### 3.9 Containment Construction

Containments for the asbestos removal shall be constructed in accordance with CDPHE Regulation 8 and this project design. Danger signs will be posted at ingress locations, and approaches to locations, where airborne concentrations of asbestos exceed or can reasonably be expected to exceed the PEL. Signs will be posted at a distance sufficiently far from the work area to permit an employee to read the sign and take the necessary protective measures to avoid exposure. Additional signs may need to be posted following construction of workplace containment barriers.

Danger signs will include the following wording:

**DANGER  
ASBESTOS  
CANCER AND LUNG DISEASE HAZARD  
AUTHORIZED PERSONNEL ONLY  
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA**

### 3.10 Set up of work areas

#### Containment Components

2"x 4"s wood studding can be used as temporary framing to support any containment systems; this may include tie wires also where needed. 1 layer of 10 mil re-enforced poly sheeting will be utilized for any exterior critical barriers, negative air machines will be installed once the poly sheeting is installed. A full 3 stage decontamination unit equipped with hot and cold water, shampoo, disposable towels, and a 2 stage water filtration unit filter all water to 5 micron, prior to being discharged into the sanitary sewer system shall be used. View ports

will be installed where appropriate with a minimum of 12" x 12" Plexi™ glass and or exterior windows.

Air flow testing utilizing smoke tubes will be performed to validate air flow direction and air exchanges.

### **3.11 Asbestos Removal**

Removal of materials containing asbestos and contaminated with asbestos shall be performed in accordance with the Colorado Department of Public Health and Environment Regulation 8 III, Abatement, Renovation and Demolition Projects and this project design.

### **3.12 Asbestos Spill Response**

In the event of a spill or a breach of the regulated work area containment, follow procedures in Section III.T. of Regulation No. 8, which includes cleaning the area outside the regulated work area. Visible debris shall be cleaned utilizing HEPA vacuuming and wet wiping plus an additional 10 horizontal feet beyond the visible debris. All filters, mop heads, and cloths utilized during clean-up activities shall be disposed of as asbestos contaminated waste in leak tight containers.

The GAC shall have available, equipment and supplies (HEPA filtered vacuum, airless sprayer with amended water, mops, rags, polyethylene sheeting, duct tape, caution tape...) for spill response in the event of accidental spill of materials containing asbestos.

In the event of an asbestos spill outside the work area containment the GAC shall:

- Make appropriate notices based on size of spill.
- Immediately wet the spilled material and surrounding area with the airless sprayer.
- Restrict access to the spill area and post warning signs to prevent entry to the area by persons other than those necessary to respond to the incident.
- Seal all openings between the contaminated and uncontaminated areas as directed by the asbestos consultant. This is to be accomplished by using polyethylene sheeting and tape.
- HEPA vacuum and wet clean all surfaces in the contaminated area.

Following completion of the above, the on sight Air Monitoring Specialist shall conduct a visual assessment of the spill area to confirm adequate cleaning has been accomplished by the GAC.

### **3.13 Asbestos Waste Transportation, Storage, and Disposal**

All ACM waste must be wrapped in two layers of 6 mil polyethylene sheeting or double-bagged in 6 mil polyethylene bags labeled with the appropriate OSHA label for asbestos and must also bear the generator label as required by EPA's 40 CFR 61 Subpart M NESHAP Standard. Containerizing and transport of asbestos wastes shall be in accordance with applicable federal and state regulations.

The existing installed building components shall be protected from damage to the extent that they remain structurally sound by the GAC, until completion of all work.

Safety scaffolding, rubbish skips, access ladders etc. shall be approved by the client and in accordance with the current Health and Safety regulations.

GAC workers will not drag or drop packaged waste. All waste equipment and materials will be hand carried, or transported in wheeled carts to waste transport vehicles.

All packaged asbestos waste shall be directly loaded from the work area onto a 6mil polyethylene lined enclosed truck or dumpster container for disposal. No waste material may be temporarily stored in the building or the work area containment.

**Waste Disposal:**

All waste containers shall be transported from the permitted work areas to an approved disposal land fill by the GAC (Denver Aurora Disposal Site).

**Waste Transporter:**

By 5280 Waste Solutions.

**3.14 Final Clean/ Final Visual Inspection Criteria**

All interior surfaces of the work area will be free of visible dust and debris. The work area must pass a final visual inspection by a CDPHE Certified Air Monitoring Specialist (AMS) leaving only critical barriers in place.

**3.15 Final Air Clearance Monitoring**

Clearance criteria for this containment shall be in accordance with CDPHE Regulation #8, Section III.P

For each work area within the project where the amount of ACM is:	State-Permitted Project in Non-School Building	
	Minimum # of samples to clear each of the following:	
	Work Area	Project
Less than 3 square feet/3 linear feet	1	5
From 3 square feet/3 linear feet up to 32 square feet/50 linear feet/volume equivalent of a 55-gallon drum	2	5
Greater than 32 square feet/50 linear feet/volume equivalent of a 55-gallon drum up to 160 square feet/260 linear feet/volume equivalent of a 55-gallon drum	5	5
Greater than 160 square feet/260 linear feet/volume equivalent of a 55- gallon drum	5	5

If any samples collected for the final air test exceeds (0.01 fibers per cubic centimeter, 0.01 f/cm<sup>3</sup> for PCM using the NIOSH Method 7400 or 70 structures per square millimeter (70 s/mm<sup>2</sup>) as analyzed by the TEM method in 40 C.F.R. Part 763 Appendix A to Subpart E (EPA 1995) the entire work area shall be re-cleaned immediately upon receipt of air test results.

Any failed abatement work area shall be re-tested and undergo Final Visual Inspection and Final Clearance Air Monitoring again. Upon notification that clearance monitoring levels are acceptable, the GAC may remove critical barriers and demobilize from the work area.

### **3.16 Personal Exposure Air Monitoring**

The GAC shall be responsible for conducting personal exposure air-monitoring as applicable in accordance with OSHA 29 CFR 1926.1101 Asbestos Construction Standard. Contractor to supply results to personnel and will post results onsite. (See Section 3.20 for Respiratory Protection).

### **3.17 Electrical Hazards Control**

All electrical power utilized during the project will be on ground fault circuit interrupters (GFCI) whose power source is located outside the work area.

### **3.18 Emergency Egress and Fire Protection**

The abatement contractor shall abide by the emergency egress rules for the facility. All contractor personnel shall receive emergency procedure orientation specific to the facility prior to initiation of abatement activities.

### **3.19 Fire Protection Plan**

1. No items capable of initiating or sustaining combustion (lighters, matches, torches, etc.) will be allowed in containment.
2. The use of flammable liquids is not permitted.
3. Any electricity utilized must be on Ground Fault Circuit Interrupters (GFCI).
4. A minimum of one, 2A: 20B: C rated fire extinguishers will be maintained on-site. There must be available at least one 2A: 20B: C rated fire extinguisher within a maximum travel distance of 10 feet from any point in the work area.
5. Workers will be trained in the use of fire extinguishers, emergency egress plans, basic fire safety, and emergency reporting procedures prior to work beginning.
6. All emergency exits will be labeled as such with tools available for breaching poly and keys in door locks where necessary.
7. The Contractor must implement an emergency action and fire prevention plan in accordance with 29 CFR 1910.38 Employee emergency plans and fire prevention plans.

### **3.20 Fall Protection**

The GAC shall provide proper fall protection and training for their employees when working above 6 feet of height in accordance with Occupational Safety and Health Administration 29 CFR Part 1926 Subpart M Fall Protection.

### **3.21 Respiratory Protection / PPE**

The GAC shall provide proper respiratory protection for their employees with NIOSH approved HEPA filters during all pre-clean, abatement removal, waste load out procedures and during waste lift operations for effected employees. The GAC shall provide proof of medical fitness to wear respiratory protection and current fit testing documentation for all employees.

### **3.22 Work Area Protection**

The GAC shall repair or replace, to the Owner's satisfaction, any damage caused by the GAC or GAC subcontractors, to existing finishes, landscaping, or other building components.

### 3.23 Additional PPE

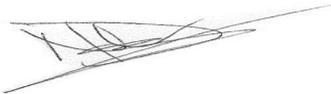
- Hooded Tyvek suits
- Safety Glasses with side shields (exception – not required when wearing a full face respirator).
- Leather Gloves
- Safety toe boots
- Fall Protection as required.
- PPE per MSDS / SDS requirements.

### 3.24 Pre-Abatement Document Submittal

The GAC shall provide the following submittals to the Owner's Asbestos Competent Person / Safety Department for approval prior to site mobilization.

- ✓ Copies of all worker AHERA / STATE certifications.
- ✓ Copies of all worker asbestos medical evaluations.
- ✓ Copies of all worker respirator fit tests.
- ✓ Copies of MSDS for all chemicals (spray-glue, encapsulant, surfactant etc.) that will be used
- ✓ Asbestos waste receipt / total.

Completed by:



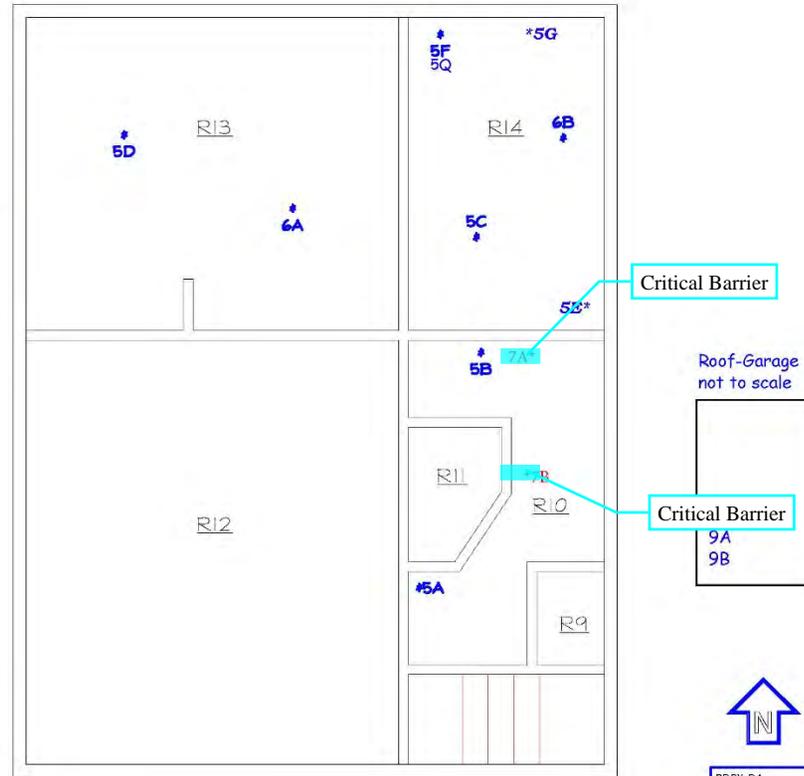
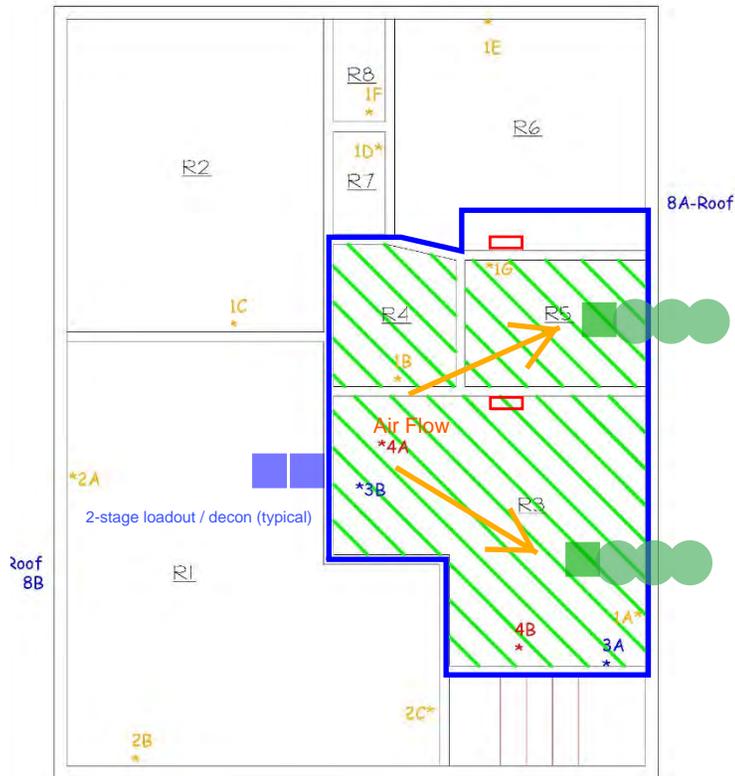
Nicolas D. Vasquez CDPHE Asbestos Project Designer Certificate # 22566

Foothills Environmental Asbestos Consulting Firm CDPHE Registration # 14925

# Appendix A

## Drawings

## ABATEMENT IN SECONDARY CONTAINMENT (12/10/18 -12/21/18)



- MAIN FLOOR PLAN**
- = Positive Asbestos at Floor
  - = Vent Boot Wrap Positive for Asbestos (10A & 10B)
  - R1 = Room Numbers
  - 4B = Asbestos Samples (Detect)
  - 4B = Asbestos Samples (Non-Detect)
  - 4B = OSHA Regulated Samples (1% or less)

**BASEMENT PLAN**

**FIGURE 2 - Asbestos Bulk Sample Locations**  
 CENTRAL 70 - Structure Survey Assessment Map  
 AP-73  
 4600 Clayton Street, Denver, CO  
 April 18, 2018  
 APEC #: 18-3066

**ALL-PHASE**  
 ENVIRONMENTAL CONSULTANTS, INC.  
 721 W 3TH STREET  
 Pueblo, CO 81003 Ph: (719) 545-0375

Drawing excerpted from All-Phase Inspection

4600 CLAYTON STREET DENVER, CO 80216 (Not to Scale)	FEI Project #AS18207-12	Date: 11/13/18	Figure 1
	Approved by: DMB	Drawn By: NDV	
Foothills Environmental, Inc. 11099 W 8 <sup>th</sup> Avenue Lakewood, CO 80215		Signature:	CDPHE CERT #22566

## Appendix B

### Certificates



Colorado Department  
of Public Health  
and Environment

## ASBESTOS CONSULTING FIRM

This certifies that

**Foothills Environmental, Inc.**

**Registration No.: ACF - 14925**

has met the registration requirements of 25-7-507, C.R.S. and the Air Quality Control Commission Regulation No. 8, Part B, and is hereby authorized to perform asbestos consulting activities as required under Regulation No 8, Part B, in the state of Colorado.

Issued: January 30, 2018

Expires: January 30, 2019

Authorized APCD Representative

SEAL



Colorado Department  
of Public Health  
and Environment

## ASBESTOS CERTIFICATION\*

This certifies that

**Nicolas Vasquez**

**Certification No.: 22566**

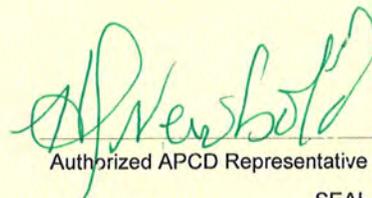
has met the requirements of 25-7-507, C.R.S. and Air Quality Control  
Commission Regulation No. 8, Part B, and is hereby certified by the  
state of Colorado in the following discipline:

**Project Designer\***

**Issued: February 08, 2018**

**Expires: February 08, 2019**

*\* This certificate is valid only with the possession of a  
current Division-approved training course certification  
in the discipline specified above.*

  
Authorized APCD Representative

SEAL



CHC Training  
Nationwide Training & Certification Experts  
www.trainingchc.com  
303.412.6360  
(855) 60.CERTIFY

1775 West 55th Avenue  
Denver, CO 80221,  
United States of America

# CERTIFICATE OF ACHIEVEMENT

This certificate is awarded to:

## NICOLAS VASQUEZ

In recognition of satisfactory completion of the EPA-approved annual asbestos refresher training course under section 206 of the Toxic Substance Control Act (TSCA) and Colorado Regulation No. 8 entitled

### PROJECT DESIGNER

COURSE DATE:	DECEMBER 21, 2017
EXPIRATION DATE:	DECEMBER 21, 2018
COURSE HOURS:	8.0

Verify Credential



*Danaya N. Benedetto*  
Co-Founder & CEO  
Training Program Manager

Credential License ID: 11084750



*Frank Hulce*  
Instructor

CHC Training Certificate No.  
R17-2200-APD-CO

Visit our Website



## 6c. Pre-Demolition Engineering Survey



Pre-Demolition Survey  
And General Demolition Plan  
For  
**4600 Clayton Street**  
**Denver, CO 80216**



Engineers: David A. Poe, P.E., S.E.  
Glen L. Wilson, E.I.

June 28, 2018  
Project No: 180113

June 28, 2018

Stephen P. Di Nardo  
JKS Industries, LLC  
747 Sheridan Blvd #9A  
Lakewood, CO 80214

Re: 4600 Clayton Street, Denver, CO 80216  
Pre-Demolition Engineering Survey per OSHA 1926.850(a)  
And General Demolition Plan

Date of Observation: 06/26/18

Dear Mr. Di Nardo:

At the request of JKS Industries (JKS), a representative from Anchor Engineering, Inc. (AEI) performed a site observation at the above-referenced structure on Tuesday, June 26, 2018.

For the purpose of this report, there are two buildings on the property. The front elevation of the residence faces west and is parallel to Clayton Street. There is a detached garage at the northeast corner of the property adjacent to the alley. At the time of our visit the buildings were vacant.

The purpose of our site visit was twofold:

1. To give an assessment of the current condition of the structure as it relates to structurally related hazards before the proposed demolition activities. OSHA 1926.850 is stated below, along with project specific applicability to the subject building.

- a. ***OSHA 1926.850(a):*** *Prior to permitting employees to start demolition operations, an engineering survey shall be made, by a competent person, of the structure to determine the condition of the framing, floors, and walls, and possibility of unplanned collapse of any portion of the structure. Any adjacent structure where employees may be exposed shall also be similarly checked. The employer shall have in writing evidence that such a survey has been performed.*

**Project Specific Applicability:** The information contained in this report satisfies the requirement of this guideline. The subcontractor shall review this report and make a copy available to all employees on the project at the pre-project meeting, and it shall also be included in the job site books.

- b. ***OSHA 1926.85(b):*** *When employees are required to work within a structure to be demolished which has been damaged by fire, flood, explosion, or other cause, the walls or floor shall be shored or braced.*

**Project Specific Applicability:** 4600 Clayton Street, Denver, CO 80216 has not been damaged by any fire, flood, explosion, or any other event. Therefore, no shoring or bracing is required.

- c. ***OSHA 1926.850(c):*** *All electric, gas, water, steam, sewer, and other service lines shall be shut off, capped, or otherwise controlled, outside the building line before demolition work is started. In each case, any utility company which is involved shall be notified in advance.*

**Project Specific Applicability:** The contractor and subcontractor will ensure all electric, gas, water, steam, sewer, and other services are to be cut off prior to any work being performed. Contractor shall confirm with KMP through the pre-demolition check list and present the necessary information in the pre-demolition meetings.

- d. **OSHA 1926.850(d)**: *If it is necessary to maintain any power, water or other utilities during demolition, such lines shall be temporarily relocated, as necessary, and protected.*

**Project Specific Applicability**: The demolition of 4600 Clayton Street, Denver, CO 80216 does not require any power, water or other utilities.

- e. **OSHA 1926.850(e)**: *It shall also be determined if any type of hazardous chemicals, gases, explosives, flammable materials, or similarly dangerous substances have been used in any pipes, tanks, or other equipment on the property. When the presence of any such substances is apparent or suspected, testing and purging shall be performed and the hazard eliminated before demolition is started.*

**Project Specific Applicability**: All types of hazardous chemicals, gases, explosives, flammable materials, or other dangerous substances shall be removed from the structure prior to demolition as part of the pre cleaning phase during the environmental remediation. All materials are to be documented, manifested, and included in the environmental close out documents.

- f. **OSHA 1926.850(f)**: *Where a hazard exists from fragmentation of glass, such hazards shall be removed.*

**Project Specific Applicability**: All hazards from fragmentation of glass shall be removed in the normal course of demolition.

- g. **OSHA 1926.850(g)**: *Where a hazard exists to employees falling through wall openings, the opening shall be protected to a height of approximately 42 inches.*

**Project Specific Applicability**: No employees are permitted to enter the structure once demolition begins. Rule applies to interior demolition.

- h. **OSHA 1926.850(h)**: *When debris is dropped through holes in the floor without the use of chutes, the area onto which the material is dropped shall be completely enclosed with barricades not less than 42 inches high and not less than 6 feet back from the projected edge of the opening above. Signs, warning of the hazard of falling materials, shall be posted at each level. Removal shall not be permitted in this lower area until debris handling ceases above.*

**Project Specific Applicability**: No employees are permitted to enter the structure once demolition begins. Rule applies to interior demolition.

- i. **OSHA 1926.850(i)**: *All floor openings, not used as material drops, shall be covered over with material substantial enough to support the weight of any load which may be imposed. Such material shall be properly secured to prevent its accidental movement.*

**Project Specific Applicability**: The building is a single story structure. Refer to the demolition sequencing section of this report for further information.

**OSHA 1926.850(j)**: *Except for the cutting of holes in floors for chutes, holes through which to drop materials, preparation of storage space, and similar necessary preparatory work, the demolition of exterior walls and floor construction shall begin at the top of the structure and proceed downward. Each story of exterior wall and floor construction shall be removed and dropped into the storage space before commencing the removal of exterior walls and floors in the story next below.*

**Project Specific Applicability**: The building is a single story structure. Refer to the demolition sequencing section of this report for further information.

- j. **1926.850(k):** *Employee entrances to multistory structures being demolished shall be completely protected by sidewalk sheds or canopies, or both, providing protection from the face of the building for a minimum of 8 feet. All such canopies shall be at least 2 feet wider than the building entrances or openings (1 foot wider on each side thereof), and shall be capable of sustaining a load of 150 pounds per square foot.*

**Project Specific Applicability:** Not applicable. Building is a single story structure. No employees are permitted to enter the structure once demolition begins.

2. Provide a general outline of the demolition procedures and sequence that is proposed to be used in the demolition of the subject structure. These outlined procedures/sequences are subject to change by AEI and/or the demolition contractor based on the observed response of the structure overall and components thereof during actual demolition operations.

No architectural or structural drawings were provided for our review.

The residence is a single-story residential structure and is assumed to be founded on a spread footings. The structure has a full basement with concrete foundation walls and an assumed concrete slab on grade floor. The residence is approximately 24'x30' with the long direction oriented north to south. The wall and roof framing is assumed to be composed of dimension lumber framing. The detached garage is approximately 12'x20' with the long direction oriented north to south. It is a wood-framed structure on a concrete foundation with a slab on grade floor.

#### **Existing Condition Observation**

During our site visit we made visual observations around the building perimeters only. The structures were partially exposed in some areas. All of the existing structural systems that were exposed to view appeared to be in good condition. We saw no evidence of noteworthy structural distress. It is our professional opinion that the possibility of un-planned collapse of any portion of the existing structures is very low. Workers may be allowed in the buildings to prepare them for demolition with such activities as removal of materials or other work that does not involve activities that affect existing structural systems.

#### **Outline of Proposed Demolition Procedures, Equipment, and Sequence**

##### **Equipment**

We anticipate demolition for this structure to be completed with heavy equipment including:

- "Track-hoe" excavators capable of reaching structural elements to be demolished. Excavators may be equipped at times with buckets/grapples, hydraulically actuated demolition hammers or shears, and other custom extensions for demolition and/or holding elements for temporary stability.
- Small skid steer loaders may also be utilized from time to time during demolition

##### **Demolition Sequencing**

##### **General**

After the commencement of demolition with heavy equipment, by necessity, structural systems from this point forth will be destroyed. Demolition should proceed as fast as practical until the structure is demolished in its entirety. The lateral stability of the buildings are provided by the perimeter wood-framed walls.

During demolition operations, care must be taken to protect and prevent damage to any active or live utilities both above and below ground.

During demolition, water will be used to wet down the area that is being demolished prior to starting the demolition. During the demolition process a water spray will be used to minimize the fugitive particulate matter emissions. The ground will be sprayed with water either by water truck or some type of water spray to minimize fugitive particulate emissions from haul trucks and demolition equipment.

**Sequence**

The residence superstructure may be collapsed into the basement starting at the south side of the building and proceeding thru the length of the building to the north. Do not drive equipment onto the footprint of the building until the structure has been collapsed. The detached garage shall be demolished starting from the south side and proceeding to the north. The alley will require temporary closure during demolition procedures to prevent public endangerment. The north and east sides of the garage are in close proximity to the north and east property lines. The property located to the north is also scheduled for demolition. The property is bordered on the south by the North Vasquez Boulevard Frontage Road. A partial temporary closure of the North Vasquez Boulevard Frontage Road may be required during demolition procedures to prevent public endangerment. Once the roof, wall, and floor systems are demolished, the slab on grade and foundations can be removed in any sequence.

**Closing**

This report constitutes an engineering review and summary of the pre-demolition condition of the structural systems of the subject buildings as well as a general outline of demolition procedures and sequencing. Note that the conclusions drawn are based on visual observations and our expertise and experience with structural engineering of building structures. Unless noted otherwise, no non-destructive or destructive testing of any kind was performed, nor was any formal engineering analysis completed. These procedures/sequences outlined herein are subject to change by AEI and/or the demolition contractor based on the observed response of the structure overall and components thereof during actual demolition operations. Anchor Engineering, Inc. shall be held harmless for damage of any kind to surrounding structures or property or for injury of any kind to any person or persons. The demolition contractor is responsible for jobsite safety. The conclusions presented in this report are based on conditions noted at the time of the observation. Commentary or recommendations regarding environmental issues are beyond the scope of this report. Should questions arise, or if further information is required regarding the content of this report, please contact our office.

Sincerely,  
Anchor Engineering, Inc.



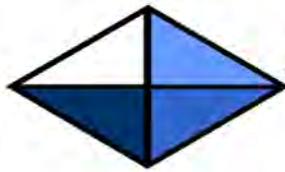
Glen L. Wilson, E.I.  
Design Engineer

Reviewed By:



David A. Poe, P.E., S.E.  
Principal

## 7. Asbestos Clearance Report



# **ALL-PHASE**

## **ENVIRONMENTAL CONSULTANTS, INC.**

December 20, 2018

### **Interior Air Monitoring Clearance (Flooring/Vent Wrap)**

Re: AP-73  
4600 Clayton St.  
Denver, Colorado 80216

To Whom It May Concern:

On, December 19, 2018, Logan Greenfield, Colorado Certified Asbestos Building Inspector and Colorado Air Monitoring Specialist with All-Phase Environmental Consultants, Inc. (APEC), conducted Air Monitoring clearances at the above referenced Subject Property. A visual inspection and air samples were collected inside the abatement containment to ensure that the asbestos fiber counts are below the regulated standard to guarantee this area is safe to re-occupy.

The Containment Air clearance consisted of five (5) 0.08um sampling cassettes, five (5) 1-16 liter per minute pumps, along with Three (3) 20-inch box fans and a one-horse power leave blower used to perform an aggressive clearance of the containment. ***All-Phase Environmental is an approved and certified Colorado Department of Public Health and Environment asbestos laboratory.***

***Microscopic inspection of the above mentioned five samples were conducted in the All Phase Environmental PCM laboratory. This inspection verified that ALL the samples taken were at or below 0.01 fiber per cubic centimeter as required by the Colorado Department of Public Health and Environmental standard for a safe room or area. See Lab analytical results attached to this document.***

**Based on the visual inspection and the analytical results, this area is considered safe to re-occupy.**

APEC will not be held responsible for the mishandling of the information contained herein, and/or any items found after December 19, 2018.

Please feel free to call with any questions and or concerns.

Sincerely,

Logan Greenfield  
Colorado Certified Asbestos Inspector and AMS - 20715





Colorado Department  
of Public Health  
and Environment

## ASBESTOS LABORATORY

This certifies that

**All Phase Environmental Consultants, Inc.**

Registration No.: AL - 24462

has met the registration requirements of 25-7-507, C.R.S. and the Air Quality Control Commission Regulation No. 8, Part B, and is hereby authorized to perform asbestos laboratory testing activities, as required by Regulation No 8, Part B, in the state of Colorado.

Issued: April 20, 2018

Expires: April 20, 2019

Authorized APCD Representative

SEAL

## 8. Materials Summary

February 18, 2019

Megan Wood  
 Kiewit Infrastructure Co.  
 160 Inverness Drive West, Suite 110  
 Englewood, CO 80112

RE: AP-73 4600 Clayton St. – Summary of Removed Materials

Dear Megan,

Below is a summary of the materials removed from 4600 Clayton St. For more details regarding the location of the Asbestos Containing Materials (ACM) and the asbestos content please refer to the Table 2 of the All-Phase Environmental SSAR (Page 16).

<b>Material Removed</b>	<b>Quantity</b>
Asbestos Containing Paper Duct Wrap	10 SF
Asbestos Containing VAT	338 SF
Clean Demolition Debris	478,800 lbs

If you have any questions or require further information regarding these quantities, please contact me at 303-238-0207.

Sincerely,  
**JKS Industries, LLC**



Jeffrey Knight  
 President

August 15, 2019 2019

Kyle Ziegler  
Kiewit Infrastructure Co.  
3543 East 46th Ave.  
Denver, CO 80216

**Re: AP-73 SSCR 4600 Clayton - RBM**

Kyle,

This letter is in reference to the SSCR for AP-73 related to RBM inventory. JKS removed all the RBM's related to this property per the SSAR. The RBM's removed from this property were disposed of properly in accordance with the EPA regulations. At the time of RBM removal JKS staged RBM's from various properties at one location for pick up and disposal. JKS at the time did not do a thorough inventory of the RBM's for the aforementioned project.

The verification that all RBM's were removed during abatement and prior to demolition was demonstrated in the final visual inspection that was performed by All Phase Environmental. If there were still RBM's in the property at the time of the inspection by All Phase Environmental, JKS would have been notified and would have had to remove the RBM's prior to passing the final visual inspection. Which further demonstrates the RBM's were removed and were not demolished in the property.

The only failure in this matter is that JKS did not properly inventory and manifest the RBM's for this specific property, but JKS is confident that the RBM's were disposed of properly within the bulk RBM consolidation that was properly manifested and disposed of in accordance with the EPA regulations.

If you have any questions or require any further information regarding this letter, please contact me at 303-238-0207.

Thank you,



Jeffrey Knight  
President



## 9. Waste Manifests

## 9a. Asbestos Waste Manifests



# ASBESTOS NESHAP WASTE SHIPMENT RECORD

1. Generator ID Number **N/A**      2. Page 1 of \_\_\_\_\_      3. Emergency Response Phone **800-424-9300**      4. Waste Tracking Number **2253287**

5. Generator's Name and Mailing Address: **COLORADO DEPARTMENT OF TRANSPORTATION  
747 SHERIDAN BLVD UNIT 9A  
LAKEWOOD CO 80214**  
Generator's Phone: **(303) 512-5909**

Generator's Project Address (if different than mailing address): **AP-73  
4600 Clayton St.  
Denver CO 80216**

6. Transporter 1: Complete Company Name and Address: **5280 WASTE SOLUTION**      Transporter Phone: **788410300**

7. Transporter 2: Complete Company Name and Address: \_\_\_\_\_      Transporter Phone: \_\_\_\_\_

8. Designated Disposal Facility Name and Site Address: **DENVER ARAPAHOE DISPOSAL  
3500 S GUN CLUB RD  
AURORA CO 80018**  
Facility's Phone: **(720) 876-2620**

9. Waste Shipping Name, Description, & Profile Number	10. Containers		11. Total Quantity	12. Unit WL/Vol.
	No.	Type		
1. RQ, NA 2212, Asbestos, 9,PG III <b>12677500</b>			<b>10</b>	<b>NONE</b>
2. _____				

13. Regulatory Agency: **Colorado Department of Public Health and Environment  
4300 Cherry Creek Drive South  
Denver, CO 80222-1530**

Emergency Notification: **CHEMTREC (800) 424-9300  
24-hour Toll Free Number**

14. Bill to & Account Number:  
**Customer Acct #: D 14925 Customer Name: JKS INDUSTRIES**

15. Contractor/Generator Certification:  
I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/ placarded, and are in all respects in proper condition for transportation and disposal according to applicable national and state governmental regulations.  
I hereby certify that the above described waste is not a hazardous waste as defined by federal, state or local regulations and does not contain regulated quantities of PCB's or radioactive materials.

Generator's/Offor's Printed/Typed Name: **Mia Steenkamp on behalf of OOO7**      Signature:      Month Day Year: **12/18/2018**

16. Transporter Acknowledgement of Receipt of Materials

Transporter 1 Printed/Typed Name: **JOE DUBRE**      Signature:      Month Day Year: **12/20/18**

Transporter 2 Printed/Typed Name: \_\_\_\_\_      Signature: \_\_\_\_\_      Month Day Year: \_\_\_\_\_

17. Special Handling Instructions:  
**Soil originating from the above site shall not be used as daily cover or sold as clean fill.**

18. Discrepancy Indication Space: \_\_\_\_\_      19. Ticket #: **3282726**

Initials of Person noting discrepancy: \_\_\_\_\_      Signature: \_\_\_\_\_      Date: \_\_\_\_\_

20. Management Method/Location:  
Landfill \_\_\_\_\_ Monofill **6** Location: \_\_\_\_\_

21. Designated Disposal Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 18

Printed/Typed Name: **Anthony**      Signature:      Month Day Year: **12/20/18**

GENERATOR

TRANSPORTER

DESIGNATED FACILITY

## 10. Weight Tickets

# 10a. Daily Load Trackers and Associated Truck Tickets

Date: 1-8-19

Project: AP 73

Prepared By: MARK KELLEY

Dump Site Ticket

Arrival Time	Departure Time	Load #	Truck #	Material Code	Description	Tons/Yards	Dump Site	Number
8:00	8:20	1	575	TRASH	DEMO DEBRIS	18 YDS	DADS	
10:40	11:00	2	575	TRASH	DEMO DEBRIS	18 YDS	DADS	
12:20	1:10	3	575	TRASH	DEMO DEBRIS	18 YDS	DADS	
2:50	3:05	4	575	TRASH	DEMO DEBRIS	18 YDS	DADS	
7:30	8:00	5	401	Trash	Demo DeBRIS	18 yDD	DADS	
8:00	8:20	6	22	Trash	Demo Debris	18 YDS	DADS	
8:25	8:40	7	575	Trash	Demo Debris	18 yDS	DADS	
8:40	8:55	8	270	Trash	Demo Debris	18 yDS	DADS	
8:20	8:40	9	CH 575	trash	Demo debris	18 yds	Dads	
9:50	10:05	10	CH 333	trash	Demo debris	18 yds	Dads	
10:30	10:45	11	CH 575	trash	Demo debris	18 yds	Dads	
11:35	12:05	12	CH 333	trash	Demo debris	18 yds	Dads	
12:30	12:45	13	CH 575	trash	Demo debris	18 yds	Dads	
3:20	3:35	14	CH 333	trash	Demo debris	18 yds	Dads	
7:30	7:45	15	CH 575	trash	Demo debris	18 yds	Dads	
9:00	9:25	16	CH 575	Trash	Demo debris	18 yds	Dads	
11:45	12:00	17	CH 575	Trash	Demo debris	18 yds	Dads	
2:00	2:30	18	CH 575	Trash	Demo debris	18 yds	Dads	
4:30	5:00	19	CH 575	trash	Demo debris	18 yds	Dads	
		20						

Legend:  
**Materials:**  
 R = Recycle  
 T = Trash  
**Description:**  
 Concrete, Asphalt, Asbestos, Lumber,  
 Construction Debris, Trash, Metals,

# CHACON'S

construction & transport



No. 8099

2920 W. 73rd Ave.  
Westminster, CO 80030  
Fax 303-331-8259  
PH 720-357-1448

BILL TO: J K S

DISPATCHED BY:

DATE: 1/8/18

JOB DESCRIPTION:

TRUCK # CH 575

I-70

TANDEM  TRAILER

MATERIAL DEMO

DEMOLITION

	LOADS	UNLOADS
--	-------	---------

JOB#	1	D.A.D.S	AP	73
------	---	---------	----	----

LOAD AT	2	"	AP	73
---------	---	---	----	----

CLAYTON<sup>SE</sup>  
8  
46th

	3	"	AP	73
--	---	---	----	----

	4	"	AP	73
--	---	---	----	----

UNLOAD AT				
-----------	--	--	--	--

D.A.D.S

2

RATE \$

HOURLY  TONMILE

START TIME 7:30am

STOP TIME 5:30

TOTAL HOURS

10

OWNER OF TRUCK:

DRIVER'S NAME	AUTHORIZED SIGNATURE
---------------	----------------------

M. March

Net due 30 days from date of this statement. Past due accounts bear interest at 1.5% per month. In the event collection of this account becomes necessary, client agrees to pay all costs and reasonable attorney fees.

# CHACONS

construction & transport



Nº 42900

2920 W. 73rd Ave  
Westminster, CO 80030  
FAX 303-487-5731  
PH 720-357-1448

BILL TO: <i>Jks industries inc</i>		
DISPATCHED BY: <i>Chacon Transport</i>		
DATE <i>1/9/19</i>	JOB DESCRIPTION:	
TRUCK # <i>GF-01</i>	<i>Central I.70</i>	
TANDEM <input type="checkbox"/> TRAILER <input checked="" type="checkbox"/>	<i>Project Mario</i>	
MATERIAL <i>Demo</i>	<i>Demo</i>	
	LOADS	UNLOADS
JOB# <i>18603</i>	<i>7:40 * 8:35 - 18-304</i>	
LOAD AT <i>46<sup>th</sup> And Clayton st</i>	<i>10:10 * 11:00 - AP-83</i>	
	<i>12:20 * 1:20 - AP-83</i>	
UNLOAD AT <i>Dads 3500 Gun Club</i>	<i>2:30 * 3:30 - AP-83</i>	
	<i>4:30 * 6:00 - AP-83</i>	
RATE \$		
HOURLY <input checked="" type="checkbox"/> TONMILE <input type="checkbox"/>		
START TIME <i>7:30</i>		(10)
STOP TIME <i>6:00 pm</i>		
TOTAL HOURS		
<i>10 1/2 hrs</i>		
	OWNER OF TRUCK: <i>Benito</i>	
DRIVER'S NAME		AUTHORIZED SIGNATURE
<i>Benito Castillo</i>		<i>Benito Castillo</i>

Net due 30 days from date of this statement. Past due accounts bear interest at 1.5% per month. In the event collection of this account becomes necessary, client agrees to pay all costs and reasonable attorney fees.

**CHACON'S**  
construction & transport



No. 10546

  
 2920 W. 73rd Ave.  
 Westminster, CO 80030  
 Fax 303-331-8259  
 PH 720-357-1448

BILL TO: JKS

DISPATCHED BY: CHACON'S

DATE: 1-9-19      JOB DESCRIPTION: 1-70

TRUCK # JD22

TANDEM  TRAILER

MATERIAL TRACTH

	LOADS	UNLOADS
JOB# 18603	1	18-304
LOAD AT	2	
46 TH	3	
CLAYTON	4	
UNLOAD AT		(6)
DAD'S		
LAND FILL		
RATE \$		
HOURLY <input checked="" type="checkbox"/> TONMILE <input type="checkbox"/>		
START TIME 7:30		
STOP TIME 11:30		
TOTAL HOURS		
4.0		
OWNER OF TRUCK: JD BRIGATOR		

DRIVER'S NAME 	AUTHORIZED SIGNATURE 
-------------------	--------------------------

Net due 30 days from date of this statement. Past due accounts bear interest at 1.5% per month. In the event collection of this account becomes necessary, client agrees to pay all costs and reasonable attorney fees.

**CHACON'S**  
construction & transport



No 50199

2920 W. 73rd Ave  
Westminster, CO 80030  
FAX 303-487-5731  
PH 720-357-1448

BILL TO: JKS Industries inc.

DISPATCHED BY: chacon's

DATE 10-9-2019 JOB DESCRIPTION:

TRUCK # 575 Central 70 project

TANDEM  TRAILER

MATERIAL Demo

	LOADS	UNLOADS
JOB# 18603	Demo	AP-83
LOAD AT clayton st/ 46th	Demo	AP-83
	Demo	AP-83
UNLOAD AT Dad's landfill		
RATE \$		
HOURLY <input checked="" type="checkbox"/> TONMILE <input type="checkbox"/>		
START TIME 7:30AM		
STOP TIME 6:30 PM		
TOTAL HOURS		
11 hrs		

OWNER OF TRUCK: chacon

DRIVER'S NAME: SM AUTHORIZED SIGNATURE: [Signature]

Net due 30 days from date of this statement. Past due accounts bear interest at 4.5% per month. In the event collection of this account becomes necessary, client agrees to pay all costs and reasonable attorney fees.

# CHACON'S

construction & transport



No. 8589

2920 W. 73rd Ave.  
Westminster, CO 80030  
Fax 303-331-8259  
PH 720-357-1448

BILL TO:

DISPATCHED BY:

DATE: 10/1/19

TRUCK # CH575

TANDEM  TRAILER

MATERIAL Demo

JOB DESCRIPTION:

Demo

	LOADS	UNLOADS
JOB#	1	DA·DS
LOAD AT	1	DA·DS
clayton	1	DA·DS
46	1	DA·DS
UNLOAD AT		
DA·DS		(A)
RATE \$		
HOURLY <input type="checkbox"/> TONMILE <input type="checkbox"/>		
START TIME 7:00 am		
STOP TIMES 5:30		
TOTAL HOURS		
10.5		
OWNER OF TRUCK:		

DRIVER'S NAME

Jose

AUTHORIZED SIGNATURE

ASUS

Net due 30 days from date of this statement. Past due accounts bear interest at 1.5% per month. In the event collection of this account becomes necessary, client agrees to pay all costs and reasonable attorney fees.

# CHACONS

construction & transport



No. 9089

2920 W. 73rd Ave.  
Westminster, CO 80030  
Fax 303-331-8259  
PH 720-357-1448

BILL TO: JKS Const		
DISPATCHED BY: Chacons Const		
DATE: 1-10-19	JOB DESCRIPTION:	
TRUCK # CH333		
TANDEM <input type="checkbox"/> TRAILER <input checked="" type="checkbox"/>		
MATERIAL Demo		
	LOADS	UNLOADS
JOB# 18603	Loads #	
LOAD AT	7:45	Deds
46 <sup>th</sup>	10:30	Deds
4	1:00	Deds
Clayton st		
UNLOAD AT		
Deds pct		(b)
RATE \$		
HOURLY <input type="checkbox"/> TONMILE <input type="checkbox"/>		
START TIME 7:00		
STOP TIME 5:30		
TOTAL HOURS		
10.5	OWNER OF TRUCK:	
DRIVER'S NAME	AUTHORIZED SIGNATURE	
Justin Costello	[Signature]	
<small>Net due 30 days from date of this statement. Past due accounts bear interest at 1.5% per month. In the event collection of this account becomes necessary, client agrees to pay all costs and reasonable attorney fees.</small>		

# CHACON'S

construction & transport



No. 11061

2920 W. 73rd Ave.  
Westminster, CO 80030  
Fax 303-331-8259  
PH 720-357-1448

BILL TO: <i>JTS</i>		
DISPATCHED BY:		
DATE: <i>11/1/19</i>	JOB DESCRIPTION:	
TRUCK # <i>CH575</i>	<i>Dem</i>	
TANDEM <input type="checkbox"/> TRAILER <input checked="" type="checkbox"/>		
MATERIAL <i>Dem</i>		
	LOADS	UNLOADS
JOB#	<i>1</i>	<i>DA. DS</i>
LOAD AT <i>Clayton 46</i>	<i>1</i>	<i>D. DS</i>
UNLOAD AT <i>DADS</i>		<i>(4)</i>
RATE \$		
HOURLY <input type="checkbox"/> TONMILE <input type="checkbox"/>		
START TIME <i>7:00am</i>		
STOP TIME <i>3:30 PM</i>		
TOTAL HOURS		
<i>8 1/2 hrs</i>	OWNER OF TRUCK:	
DRIVER'S NAME	AUTHORIZED SIGNATURE	
<i>JOSE</i>	<i>[Signature]</i>	
<small>Net due 30 days from date of this statement. Past due accounts bear interest at 1.5% per month. In the event collection of this account becomes necessary, client agrees to pay all costs and reasonable attorney fees.</small>		

## 10b. Waste Weight Tickets



2543886

Denver Arapahoe Disposal  
3500 S Gun Club , PO Box 460397  
Aurora, CO, 80018  
Ph: (720)-876-2620

Original  
Ticket# 3291538

Customer Name	JKSINDUSTRIESLLC	JKS Industri	Carrier	JKS INDUSTRIES	JKS INDUSTRIES
Ticket Date	01/08/2019		Vehicle#	1	Volume
Payment Type	Credit Account		Container		
Manual Ticket#			Driver		
Hauling Ticket#			Check#		
Route			Billing #	0014925	
State Waste Code			Gen EPA ID		
Manifest			Grid		
Destination					
PO					
Profile	( )				
Generator					

	Time	Scale	Operator	Inbound	Gross	2 lb*
In	01/08/2019 07:04:18	MANUAL WT	aramirez		Tare	1 lb*
Out	01/08/2019 07:04:18		aramirez		Net	1 lb
			* Manual Weight		Tons	
Comments	10 loads for central 70 project 306-14925-- 1/8/19					

PLEASE MAKE SURE YOUR TICKET IS CORRECT BEFORE SIGNING.

Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 CDY-CONST DEBRIS - 100		170.00	Yards				

Total Fees  
Total Ticket

402WM-N  
Driver's Signature



Date: 1-8-19

Ticket#: AP 73

ACCT#:306-14925

JKS INDUSTRIES  
CENTRAL 70 PROJECT

CDY 18 YDS X 25 YDS HIGHSIDES \_\_\_\_\_

DISPOSAL SITE: DADS  
3500 S GUN CLUB RD  
AURORA CO 80018

DRIVER:

Signature: M.A.C.H

10 x 17 = 170 yds

Date: 1-8-19

Ticket#: AP 73

ACCT#:306-14925

JKS INDUSTRIES  
CENTRAL 70 PROJECT

CDY 18 YDS X 25 YDS HIGHSIDES \_\_\_\_\_

DISPOSAL SITE: DADS  
3500 S GUN CLUB RD  
AURORA CO 80018

DRIVER:

Signature: M.A.C.H

Date: 1-8-19

Ticket#: AP 73

ACCT#:306-14925

JKS INDUSTRIES  
CENTRAL 70 PROJECT

CDY 18 YDS X 25 YDS HIGHSIDES \_\_\_\_\_

DISPOSAL SITE: DADS  
3500 S GUN CLUB RD  
AURORA CO 80018

DRIVER:

Signature: M.A. off

Date: 1-8-19

Ticket#: AP 73

ACCT#:306-14925

JKS INDUSTRIES  
CENTRAL 70 PROJECT

CDY 18 YDS X 25 YDS HIGHSIDES \_\_\_\_\_

DISPOSAL SITE: DADS  
3500 S GUN CLUB RD  
AURORA CO 80018

DRIVER:

Signature: M.A. off



2543894

Denver Arapahoe Disposal  
3500 S Gun Club, PO Box 460397  
Aurora, CO, 80018  
Ph: (720) 876-2620

Original  
Ticket# 3292279

Customer Name	JKSINDUSTRIESLLC	JKS Industri	Carrier	JKS INDUSTRIES	JKS INDUSTRIES
Ticket Date	01/09/2019		Vehicle#	1	Volume
Payment Type	Credit Account		Container		
Manual Ticket#			Driver		
Hauling Ticket#			Check#		
Route			Billing #	0014925	
State Waste Code			Gen EPA ID		
Manifest			Grid		
Destination					
PO					
Profile	( )				
Generator					

	Time	Scale	Operator	Inbound	Gross	
In	01/09/2019 07:29:37	MANUAL WT	aramirez		Tare	2 lb*
Out	01/09/2019 07:29:37		aramirez		Net	1 lb*
			* Manual Weight		Tons	1 lb

Comments 12 loads central 70 project 1/9/19 = 204 yds total for 306-14925

PLEASE MAKE SURE YOUR TICKET IS CORRECT BEFORE SIGNING.

Product	LD%	Qty	UDM	Rate	Fee	Amount	Origin
1 CDY-CONST DEBRIS - 100		204.00	Yards				

Total Fees  
Total Ticket

402WM-N

Driver's Signature



Date: 2-9-19

Ticket#: AP-73

ACCT#:306-14925

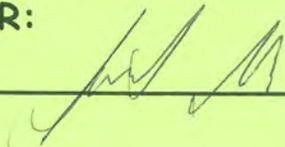
JKS INDUSTRIES  
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES \_\_\_\_\_

DISPOSAL SITE: DADS  
3500 S GUN CLUB RD  
AURORA CO 80018

DRIVER:

Signature: \_\_\_\_\_



---

Date: 1-9-19

Ticket#: ~~18304~~ AP-73

ACCT#:306-14925

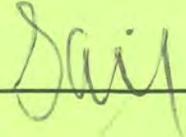
JKS INDUSTRIES  
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES \_\_\_\_\_

DISPOSAL SITE: DADS  
3500 S GUN CLUB RD  
AURORA CO 80018

DRIVER:

Signature: \_\_\_\_\_



Date: 1-8-19

Ticket#: 18-304

ACCT#:306-14925

JKS INDUSTRIES  
CENTRAL 70 PROJECT

CDY 18 YDS  25 YDS HIGHSIDES

DISPOSAL SITE: DADS  
3500 S GUN CLUB RD  
AURORA CO 80018

DRIVER:

Signature: SWAID T

Date: 1-9-19

Ticket#: 18-304

ACCT#:306-14925

JKS INDUSTRIES  
CENTRAL 70 PROJECT

CDY 18 YDS  25 YDS HIGHSIDES

DISPOSAL SITE: DADS  
3500 S GUN CLUB RD  
AURORA CO 80018

DRIVER:

Signature: Burd



2477129

Denver Arapahoe Disposal  
3500 S Gun Club , PO Box 460397  
Aurora, CO, 80018  
Ph: (720) 876-2620

Original  
Ticket# 3293150

Customer Name	JKSINDUSTRIESLLC	JKS Industri	Carrier	JKS INDUSTRIES	JKS INDUSTRIES
Ticket Date	01/10/2019		Vehicle#	1	Volume
Payment Type	Credit Account		Container		
Manual Ticket#			Driver		
Hauling Ticket#			Check#		
Route			Billing #	0014925	
State Waste Code			Gen EPA ID		
Manifest			Grid		
Destination					
PO					
Profile	( )				
Generator					

	Time	Scale	Operator	Inbound	Gross	2 lb*
In	01/10/2019 13:59:03	MANUAL WT	SLA		Tare	1 lb*
Out	01/10/2019 13:59:03		SLA		Net	1 lb
			* Manual Weight		Tons	

Comments

PLEASE MAKE SURE YOUR TICKET IS CORRECT BEFORE SIGNING.

Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1	CDY-CONST DEBRIS - 100	126.00	Yards				

Total Fees  
Total Ticket





Date: 1-10-19

Ticket#: AP 73

ACCT#:306-14925

JKS INDUSTRIES  
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES \_\_\_\_\_

DISPOSAL SITE: DADS  
3500 S GUN CLUB RD  
AURORA CO 80018

Signature: DRIVER: Justin Costello

Date: 1-10-19

Ticket#: AP-73

ACCT#:306-14925

JKS INDUSTRIES  
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES \_\_\_\_\_

DISPOSAL SITE: DADS  
3500 S GUN CLUB RD  
AURORA CO 80018

Signature: DRIVER: [Signature]

Date: 1-10-19

Ticket#: AP 73

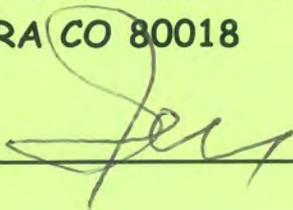
ACCT#:306-14925

JKS INDUSTRIES  
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES \_\_\_\_\_

DISPOSAL SITE: DADS  
3500 S GUN CLUB RD  
AURORA CO 80018

DRIVER:

Signature: \_\_\_\_\_ 

Date: 1-10-19

Ticket#: AP-73

ACCT#:306-14925

JKS INDUSTRIES  
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES \_\_\_\_\_

DISPOSAL SITE: DADS  
3500 S GUN CLUB RD  
AURORA CO 80018

DRIVER:

Signature: \_\_\_\_\_

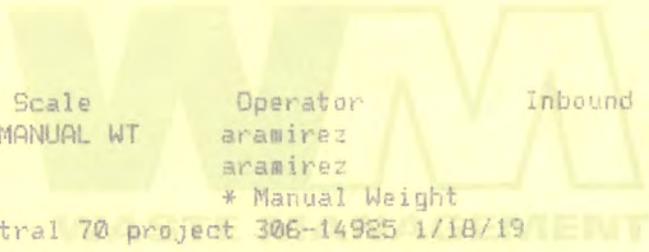


2543966

Denver Arapahoe Disposal  
3500 S Gun Club , PO Box 460397  
Aurora, CO, 80018  
Ph: (720) 876-2620

Original  
Ticket# 3297146

Customer Name	JKSINDUSTRIESLLC	JKS Industri	Carrier	JKS INDUSTRIES	JKS INDUSTRIES
Ticket Date	01/18/2019		Vehicle#	1	Volume
Payment Type	Credit Account		Container		
Manual Ticket#			Driver		
Hauling Ticket#			Check#		
Route			Billing #	0014925	
State Waste Code			Gen EPA ID		
Manifest			Grid		
Destination					
PO					
Profile	( )				
Generator					



	Time	Scale	Operator	Inbound	Gross	2 lb*
In	01/18/2019 07:01:42	MANUAL WT	aramirez		Tare	1 lb*
Out	01/18/2019 07:01:42		aramirez		Net	1 lb
			* Manual Weight		Tons	

Comments 85yds total central 70 project 306-14925 1/18/19

PLEASE MAKE SURE YOUR TICKET IS CORRECT BEFORE SIGNING.

Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 CDY-CONST DEBRIS - 100		85.00	Yards				

Total Fees  
Total Ticket



Date: 1-18-19

Ticket#: AP-73

ACCT#:306-14925

JKS INDUSTRIES  
CENTRAL 70 PROJECT

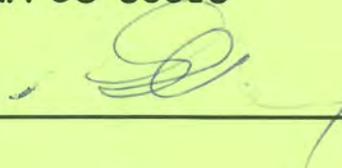
5X17 = 85

CDY 18 YDS X 25 YDS HIGHSIDES \_\_\_\_\_

DISPOSAL SITE: DADS  
3500 S GUN CLUB RD  
AURORA CO 80018

DRIVER:

Signature: \_\_\_\_\_



Date: 1-18-19

Ticket#: AP-73

ACCT#:306-14925

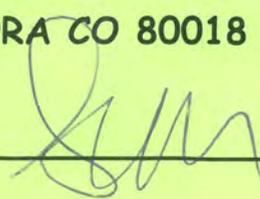
JKS INDUSTRIES  
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES \_\_\_\_\_

DISPOSAL SITE: DADS  
3500 S GUN CLUB RD  
AURORA CO 80018

DRIVER:

Signature: \_\_\_\_\_





Date: 1-18-19

Ticket#: AP-89 73

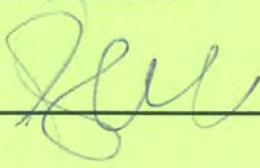
ACCT#:306-14925

JKS INDUSTRIES  
CENTRAL 70 PROJECT

CDY 18 YDS X 25 YDS HIGHSIDES \_\_\_\_\_

DISPOSAL SITE: DADS  
3500 S GUN CLUB RD  
AURORA CO 80018

DRIVER:

Signature: \_\_\_\_\_ 



## 11. Dump Diversion Summary

**JKS Industries**  
**AP-73: 4600 Clayton St.**

Descriptions		Dump Diversion / Recycle %								
Phase	Activity	Unit of Measure	# of Yards per Container	# of Containers	Total Number of Yards	Pounds Per Yard **	Total Lbs	Recycled Yes/No	Pounds of Recycle or Dump Diversion	% of Recycle or Dump Diversion
Abatement	Trash Rolloff	Cubic Yard	-	-	-	450.00	-			
Abatement	Asbestos Containers	Cubic Yard	-	-	-	500.00	-			
Demolition	Demolition Construction Debris	Cubic Yard	18	19	342.00	1,400.00	478,800			
Demolition	Concrete Debris	Cubic Yard	12	-	-	4,050.00	-	x	-	0.00%
Demolition	Trees	Cubic Yard	-	-	-	500.00	-	x	-	0.00%
Demolition	Steel	Lbs	-	-	-	-	-	x	-	0.00%
Demolition	Copper	Lbs	-	-	-	-	-	x	-	0.00%
				19	342.00		478,800		-	0.00%

STUDY NOTES

- 1 The source material used for the Volume to Weight conversions came from Waste Management web site.
- 2 Conversions ratio's have been modified based on estimated compaction.

## 12. Containment Entry/Exit Log

# JKS INDUSTRIES

## CONTAINMENT SIGN-IN & SIGN-OUT SHEET

Job Name: AP-73

Job #: 18-304

Date: 12 18 18

NAME	SIGN-IN	SIGN-OUT	SIGN-IN	SIGN-OUT
1. Eltigueo	7:00	11:30	12:00	3:30
2. Trina B	7:00	11:30	12:00	3:30
3. Monica B	7:00	11:30	12:00	4:30
4. Ramira	7:00	11:30	17:00	3:30
5. Taina P	7:00	11:30	12:00	4:30
6. Ricardo F	7:00	11:30	12:00	4:30
7. Alfredo R	7:00	11:30	12:00	4:30
8. Juan Carlos	7:00	11:30	12:00	4:30
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				

# JKS INDUSTRIES

## CONTAINMENT SIGN-IN & SIGN-OUT SHEET

Job Name: Ap 73

Job #: 18 304

Date: 12 15 18

NAME	SIGN-IN	SIGN-OUT	SIGN-IN	SIGN-OUT
1. JEAN CARLOS L	7:00	11:00	11:30	4:30
2. RICARDO F	7:00	11:00	11:30	4:30
3. TANIA P	7:00	11:00	11:30	4:30
4. ALFREDO R	7:00	11:00	11:30	4:30
5. MONICA B	7:00	11:00	11:30	4:30
6. IRINA B	9:30	11:30	12:00	3:30
7. ETIQUO	9:30	11:30	12:00	3:30
8. PARMIRA D	9:30	11:30	12:00	3:30
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				

## 13. Daily Logs



















